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      290              295              300
Ser Val Met Thr Asn Met Arg Ala Pro Ser Thr Thr Gly Gly Ile Gly
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Ala Val Gly Ser Phe Asn Ser
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<210> 2861
 <211> 756
 <212> DNA
 <213> Homo sapiens

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<400> 2861
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180
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<210> 2862
 <211> 252
 <212> PRT
 <213> Homo sapiens

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<400> 2862
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Ser Glu Ala Leu Ala Val Ile Asn Gly Asn Lys Gly Pro Pro Val
35              40              45
Gly Ser Arg Ile Ser Met Pro Thr Thr Lys Pro Arg Pro Gly Leu Arg

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50		55		60	
Glu	Glu	Lys	Leu	Ala	Ser
65		70		75	
Lys	Lys	Leu	Asp	Ser	Thr
		85		90	
Gly	His	Thr	Gly	Pro	Val
		100		105	
Gly	Ile	Ser	Ser	Gly	Leu
		115		120	
Val	Ser	Leu	Glu	Pro	Leu
		130		135	
Arg	Ser	Ser	Gln	Ile	His
145		150		155	
Ser	Ser	Ser	Gln	Ala	Gln
		165		170	
Ser	Glu	Ala	Gln	Asp	Ala
		180		185	
Gln	His	Ser	Ala	Val	Gln
		195		200	
Ile	Ser	Lys	Ser	Gln	Thr
		210		215	
Gln	Leu	Ser	Cys	Ser	Ser
225		230		235	
Met	Tyr	Arg	Leu	Pro	Leu
		245		250	

<210> 2863

<211> 711

<212> DNA

<213> Homo sapiens

<400> 2863

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180

gcaccaactc aactgttttt tcctctcatc cgtaactgtg aactgagcag gatctatggc
240

actgcatgtt actgccacca caaacatctc tggtgttcct catcgtacat tcctcagagt
300

cgactgagat acacacctca tccagcatat gctacctttt gcaggccaaa ggagaactgg
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tggcagtaca cccaaggaag gagatagct tccacaccac agaaatttta cctcacacct
420

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600

tttgatggcc atgcagggtg tgcttggtcc caggcagtca gtgaaagact cttttattat
660

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<210> 2864

<211> 237

<212> PRT

<213> Homo sapiens

<400> 2864

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Cys	Val	Glu	Arg	Ala	Pro	Ser	Gly	Gly	Val	Val	Val	Ala	Pro	Ser	Ser
		20					25					30			
Ser	Gly	Arg	Ile	Val	Trp	Ser	Pro	Ala	Val	Pro	Gly	Ile	Pro	Val	Arg
	35					40					45				
Ser	Ser	Ser	Leu	Pro	Leu	Phe	Ser	Asp	Ala	Met	Pro	Ala	Pro	Thr	Gln
	50				55					60					
Leu	Phe	Phe	Pro	Leu	Ile	Arg	Asn	Cys	Glu	Leu	Ser	Arg	Ile	Tyr	Gly
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Thr	Ala	Cys	Tyr	Cys	His	His	Lys	His	Leu	Cys	Cys	Ser	Ser	Ser	Tyr
			85					90						95	
Ile	Pro	Gln	Ser	Arg	Leu	Arg	Tyr	Thr	Pro	His	Pro	Ala	Tyr	Ala	Thr
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Phe	Cys	Arg	Pro	Lys	Glu	Asn	Trp	Gln	Tyr	Thr	Gln	Gly	Arg	Arg	
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Tyr	Ala	Ser	Thr	Pro	Gln	Lys	Phe	Tyr	Leu	Thr	Pro	Pro	Gln	Val	Asn
	130				135					140					
Ser	Ile	Leu	Lys	Ala	Asn	Glu	Tyr	Ser	Phe	Lys	Val	Pro	Glu	Phe	Asp
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Gly	Lys	Asn	Val	Ser	Ser	Ile	Leu	Gly	Phe	Asp	Ser	Asn	Gln	Leu	Pro
			165					170					175		
Ala	Asn	Ala	Pro	Ile	Glu	Asp	Arg	Arg	Ser	Ala	Ala	Thr	Cys	Leu	Gln
		180					185						190		
Thr	Arg	Gly	Met	Leu	Leu	Gly	Val	Phe	Asp	Gly	His	Ala	Gly	Cys	Ala
	195					200						205			
Cys	Ser	Gln	Ala	Val	Ser	Glu	Arg	Leu	Phe	Tyr	Tyr	Ile	Ala	Val	Ser
	210				215					220					
Leu	Leu	Pro	His	Glu	Thr	Leu	Leu	Glu	Ile	Glu	Asn	Ala			
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<210> 2865

<211> 585

<212> DNA

<213> Homo sapiens

<400> 2865

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240

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 480
 gagacatgtt tctccaggat gccaaaggaa atgctacctc gtggctacac atattatgaa
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<210> 2866

<211> 134

<212> PRT

<213> Homo sapiens

<400> 2866

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Ser	Met	Ser	Ser	Val	Tyr	Leu	Gln	Cys	Lys	Val	Leu	Ile	Cys	Asp	Ser
			20					25					30		
Ser	Asp	His	Gln	Ser	Arg	Cys	Asn	Gln	Gly	Cys	Val	Ser	Arg	Ser	Lys
		35					40				45				
Arg	Asp	Ile	Ser	Ser	Tyr	Lys	Trp	Lys	Thr	Asp	Ser	Ile	Ile	Gly	Pro
	50					55				60					
Ile	Arg	Leu	Lys	Arg	Asp	Arg	Ser	Ala	Ser	Gly	Asn	Ser	Gly	Phe	Gln
65				70					75					80	
His	Glu	Thr	His	Ala	Glu	Glu	Thr	Pro	Asn	Gln	Pro	Phe	Asn	Ser	Val
			85					90					95		
His	Leu	Phe	Ser	Phe	Met	Val	Leu	Ala	Leu	Asn	Val	Val	Thr	Val	Ala
			100					105					110		
Thr	Ile	Thr	Val	Arg	His	Phe	Val	Asn	Gln	Arg	Ala	Asp	Tyr	Lys	Tyr
		115					120					125			
Gln	Lys	Leu	Gln	Asn	Tyr										
			130												

<210> 2867

<211> 444

<212> DNA

<213> Homo sapiens

<400> 2867

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 120
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 180
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tcccagtggc gaccaagctc ttcaaggggg ggggtgcagtc ttggcggggc ccagggacgt
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<210> 2868
 <211> 84
 <212> PRT
 <213> Homo sapiens

<400> 2868
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 Lys Gly Glu Glu Leu Ser Ala Ala Ala Ile Lys Arg Ile Val Ala Thr
 20 25 30
 Ala Lys Ala Ser Gly Lys Lys Leu Gln Lys Val Thr Leu Lys Val Ser
 35 40 45
 Pro Arg Gly Ile Ile Leu His Pro Gly His His Pro Ala Pro Arg Gln
 50 55 60
 His Cys Cys His Ser Arg Leu Val Ala Ala Ala Pro Arg Pro Cys Trp
 65 70 75 80
 Trp Cys Trp Arg

<210> 2869
 <211> 5811
 <212> DNA
 <213> Homo sapiens

<400> 2869
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 180
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<210> 2870

<211> 258

<212> PRT

<213> Homo sapiens

<400> 2870

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Pro	Ile	Lys	Ser	Asp	Leu	His	Ile	Lys	Asp	Asp	Pro	Asp	Gly	Ile	Pro
		20						25					30		
Ser	Lys	Arg	Phe	Lys	Thr	Met	Ser	Pro	Ser	Gln	Met	Ile	Met	Pro	Asn
		35					40					45			
Val	Met	Glu	Met	Ile	Ala	Ala	Leu	Gly	Pro	Gly	Pro	Ser	Pro	Tyr	Pro
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Leu	Pro	Pro	Pro	Pro	Gly	Gly	Thr	Asn	Ser	Asn	Asp	Tyr	Ser	Ser	Gln
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Gly	Asn	Asn	Tyr	Gln	Gly	His	Gly	Asn	Phe	Asp	Phe	Pro	His	Gly	Asn
				85					90					95	
Pro	Gly	Gly	Thr	Ser	Met	Asn	Asp	Phe	Met	His	Gly	Pro	Pro	Gln	Leu
			100					105						110	
Ser	His	Pro	Pro	Asp	Met	Pro	Asn	Asn	Met	Ala	Ala	Leu	Glu	Lys	Pro
		115					120					125			
Leu	Ser	His	Pro	Met	Gln	Glu	Thr	Met	Pro	His	Ala	Gly	Ser	Ser	Asp
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Gln	Pro	His	Pro	Ser	Ile	Gln	Gln	Gly	Leu	His	Val	Pro	His	Pro	Ser
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Ser	Gln	Ser	Gly	Pro	Pro	Leu	His	His	Ser	Gly	Ala	Pro	Pro	Pro	Pro
				165					170					175	
Pro	Ser	Gln	Pro	Pro	Arg	Gln	Pro	Pro	Gln	Ala	Ala	Pro	Ser	Ser	His
			180					185					190		
Pro	His	Ser	Asp	Leu	Thr	Phe	Asn	Pro	Ser	Ser	Ala	Leu	Glu	Gly	Gln
		195					200					205			
Ala	Gly	Ala	Gln	Gly	Ala	Ser	Asp	Met	Pro	Glu	Pro	Ser	Leu	Asp	Leu
	210					215					220				
Leu	Pro	Glu	Leu	Thr	Asn	Pro	Asp	Glu	Leu	Leu	Ser	Tyr	Leu	Asp	Pro
225					230					235					240
Pro	Asp	Leu	Pro	Ser	Asn	Ser	Asn	Asp	Asp	Leu	Leu	Ser	Leu	Phe	Glu
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<210> 2871

<211> 786

<212> DNA

<213> Homo sapiens

<400> 2871

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660
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<210> 2872

<211> 153

<212> PRT

<213> Homo sapiens

<400> 2872

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Phe Gly Glu Pro Tyr Ile Phe Glu Glu Leu Leu Gly Leu Lys Ile Arg
20           25           30
Ile Ser Pro Asp Ala Phe Phe Gln Ile Asn Thr Ala Gly Ala Glu Met
35           40           45
Leu Tyr Trp Thr Val Gly Glu Leu Thr Gly Val Asn Ser Asp Thr Ile
50           55           60
Leu Leu Asp Ile Cys Cys Gly Thr Gly Val Ile Gly Leu Pro Leu Ala
65           70           75           80
Gln His Thr Ser Arg Val Leu Gly Ile Glu Leu Leu Glu Gln Ala Val
85           90           95
Glu Asp Ala Arg Trp Thr Ala Ala Phe Asn Gly Ile Thr Asn Ser Glu
100          105          110
Phe His Thr Gly Gln Ala Glu Lys Ile Leu Pro Gly Leu Leu Lys Ser
115          120          125
Lys Glu Asp Gly Gln Ser Ile Val Ala Val Val Asn Pro Ala Arg Ala

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130
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140

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<213> Homo sapiens

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<210> 2874
<211> 248
<212> PRT

<213> Homo sapiens

<400> 2874

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          20           25           30
Lys Leu Lys Ala Ser Ser Arg Thr Ser Ala Leu Leu Ser Gly Phe Ala
          35           40           45
Met Val Ala Met Val Glu Val Gln Leu Asp Ala Asp His Asp Tyr Pro
          50           55           60
Pro Gly Leu Leu Ile Ala Phe Ser Ala Cys Thr Thr Val Leu Val Ala
65           70           75           80
Gly His Leu Phe Ala Leu Met Ile Ser Thr Cys Ile Leu Pro Asn Ile
          85           90           95
Glu Ala Val Ser Asn Cys Thr Ile Ser Thr Arg Lys Glu Ser Pro His
          100          105          110
Glu Arg Met His Arg His Ile Glu Leu Ala Trp Ala Phe Ser Thr Val
          115          120          125
Ile Gly Thr Leu Leu Phe Leu Ala Glu Val Val Leu Leu Cys Trp Val
          130          135          140
Lys Phe Leu Pro Leu Lys Lys Gln Pro Gly Gln Pro Arg Pro Thr Ser
145          150          155          160
Lys Pro Pro Ala Ser Gly Ala Ala Ala Asn Val Ser Thr Ser Gly Ile
          165          170          175
Thr Pro Gly Gln Ala Ala Ala Ile Ala Ser Thr Thr Ile Met Val Pro
          180          185          190
Phe Gly Leu Ile Phe Ile Val Phe Ala Val His Phe Tyr Arg Ser Leu
          195          200          205
Val Ser His Lys Thr Asp Arg Gln Phe Gln Glu Leu Asn Glu Leu Ala
          210          215          220
Glu Phe Ala Arg Leu Gln Asp Gln Leu Asp His Arg Gly Asp His Pro
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<211> 593

<212> DNA

<213> Homo sapiens

<400> 2875

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240
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300
ccaatggata ccatatttgt taagcaagtt aaagaaggag gacctgcttt tgaagctgga
360

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ttatgtacag gtgaccgaat tataaaagtc aatggagaaa gtgttattgg caaaacctat
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 480
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<210> 2876

<211> 193

<212> PRT

<213> Homo sapiens

<400> 2876

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			20					25					30		
Glu	Gln	Ser	Glu	Thr	Val	Ser	Leu	Ser	Glu	Asp	Glu	Thr	Phe	Ser	Trp
			35				40					45			
Pro	Gly	Pro	Lys	Thr	Val	Thr	Leu	Lys	Arg	Thr	Ser	Gln	Gly	Phe	Gly
	50					55					60				
Phe	Thr	Leu	Arg	His	Phe	Ile	Val	Tyr	Pro	Pro	Glu	Ser	Ala	Ile	Gln
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Phe	Ser	Tyr	Lys	Asp	Glu	Glu	Asn	Gly	Asn	Arg	Gly	Gly	Lys	Gln	Arg
			85					90						95	
Asn	Arg	Leu	Glu	Pro	Met	Asp	Thr	Ile	Phe	Val	Lys	Gln	Val	Lys	Glu
		100						105					110		
Gly	Gly	Pro	Ala	Phe	Glu	Ala	Gly	Leu	Cys	Thr	Gly	Asp	Arg	Ile	Ile
		115					120					125			
Lys	Val	Asn	Gly	Glu	Ser	Val	Ile	Gly	Lys	Thr	Tyr	Ser	Gln	Val	Ile
	130					135					140				
Ala	Leu	Ile	Gln	Asn	Ser	Asp	Thr	Thr	Leu	Glu	Leu	Ser	Val	Met	Pro
145					150					155					160
Lys	Asp	Glu	Asp	Ile	Leu	Gln	Val	Val	Ser	Phe	Ile	Tyr	Ser	Tyr	Met
			165						170					175	
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Tyr

<210> 2877

<211> 1921

<212> DNA

<213> Homo sapiens

<400> 2877

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300
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420
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480
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780
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 1920
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 1921

<210> 2878
 <211> 451
 <212> PRT
 <213> Homo sapiens

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 Thr Glu Glu Gly Lys Glu Val Trp Asp Tyr Val Thr Val Arg Lys Asp
 35 40 45
 Ala Tyr Met Phe Trp Trp Leu Tyr Tyr Ala Thr Thr Pro Ala Arg Thr
 50 55 60
 Ser Glu Leu Pro Leu Val Met Trp Leu Gln Gly Gly Pro Gly Gly Ser
 65 70 75 80
 Ser Thr Gly Phe Gly Asn Phe Glu Glu Ile Gly Pro Leu Asp Ser Asp
 85 90 95
 Leu Lys Pro Arg Lys Thr Thr Trp Leu Gln Ala Ala Ser Leu Leu Phe
 100 105 110
 Val Asp Asn Pro Val Gly Thr Gly Phe Ser Tyr Val Asn Gly Ser Gly
 115 120 125
 Ala Tyr Ala Lys Asp Leu Ala Met Val Ala Ser Asp Met Met Val Leu
 130 135 140
 Leu Lys Thr Phe Phe Ser Cys His Lys Glu Phe Gln Thr Val Pro Phe
 145 150 155 160
 Tyr Ile Phe Ser Glu Ser Tyr Gly Gly Lys Met Ala Ala Gly Ile Gly
 165 170 175
 Leu Glu Leu Tyr Lys Ala Ile Gln Arg Gly Thr Ile Lys Cys Asn Phe
 180 185 190
 Ala Gly Val Ala Leu Gly Asp Ser Trp Ile Ser Pro Val Asp Ser Val
 195 200 205
 Leu Ser Trp Gly Pro Tyr Leu Tyr Ser Met Ser Leu Leu Glu Asp Lys
 210 215 220
 Gly Leu Ala Glu Val Ser Lys Val Ala Glu Gln Val Leu Asn Ala Val
 225 230 235 240
 Asn Lys Gly Leu Tyr Arg Glu Ala Thr Glu Leu Trp Gly Lys Ala Glu
 245 250 255
 Met Ile Ile Glu Gln Asn Thr Asp Gly Val Asn Phe Tyr Asn Ile Leu
 260 265 270
 Thr Lys Ser Thr Pro Thr Ser Thr Met Glu Ser Ser Leu Glu Phe Thr
 275 280 285
 Gln Ser His Leu Val Cys Leu Cys Gln Arg His Val Arg His Leu Gln
 290 295 300
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<211> 1352

<212> DNA

<213> Homo sapiens

<400> 2879

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180	cagtggaaac	ccgaccgga	aggcttcctc	cctcggtccc	caggcgcttc	ctgaggctcc
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300	cctgcgggtg	gctggacctt	ggctcccggg	gaggggctca	ccgtgttctc	tcttgctctt
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420	aattctgatt	ggtacttggt	cacaggctcc	tctcttacct	gcacccctgg	gcccgcacgt
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660	cagggcgctt	ttcagccata	gacttcaagc	cccattgagg	tggcccgccg	ggctgggtgc
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<211> 376

<212> PRT

<213> Homo sapiens

<400> 2880

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Leu	Ile	Gln	Pro	Ala	Asn	His	Val	Leu	Pro	Ala	Ser	Phe	Gly	Asn	Ser
	35					40						45			
Asp	Trp	Tyr	Leu	Val	Thr	Gly	Ser	Ser	Leu	Thr	Cys	Thr	Pro	Gly	Pro
	50					55					60				
Ala	Arg	Gly	Glu	Arg	Pro	Pro	Arg	Leu	Gly	Leu	Pro	Thr	Pro	Gly	Val
65					70				75						80
Pro	Val	Xaa	Asp	Lys	Tyr	Ala	Pro	Lys	Leu	Asp	Ser	Pro	Tyr	Phe	Arg
			85					90						95	
His	Ser	Ser	Val	Ser	Phe	Phe	Pro	Ser	Phe	Pro	Pro	Ala	Ile	Pro	Gly
			100					105					110		
Leu	Pro	Thr	Leu	Leu	Pro	His	Pro	Gly	Pro	Phe	Gly	Ser	Leu	Gln	Gly
		115					120					125			
Ala	Phe	Gln	Pro	Lys	Thr	Ser	Ser	Pro	Ile	Glu	Val	Ala	Arg	Arg	Ala
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Tyr	Arg	Ala	Val	Val	Lys	Lys	Pro	Gly	Arg	Trp	Cys	Ala	Val	His	Val
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Gln	Ile	Ala	Trp	Gln	Ile	Tyr	Arg	His	Gln	Gln	Lys	Ile	Lys	Glu	Met
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305				310				315				320			
Pro	Ser	Phe	Pro	Ala	Pro	Pro	Pro	Trp	Pro	Lys	Ser	Val	Asp	Ala	Glu
				325				330				335			
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				340				345				350			
Glu	Glu	Gln	Glu	Arg	Asp	Leu	Leu	Glu	Lys	Thr	Arg	Leu	Leu	Ser	Arg
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<212> DNA
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660
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720
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900

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<210> 2882
 <211> 96
 <212> PRT
 <213> Homo sapiens

<400> 2882
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 Val His Pro Gln His Phe Leu Arg Lys Arg Thr Pro Ala Gln Ala Gly
 35 40 45
 Pro Ala Ile Ser Pro Leu Pro Thr Asp Ser Gln Ser Pro Leu Ala Ser
 50 55 60
 Pro Leu Asp Val Ser Gly Gln Gly Ser Gly Gly Cys Ser Phe Asp Lys
 65 70 75 80
 Lys Lys Lys Lys Phe Tyr Val Phe Lys Leu Leu Leu Gln Asp Phe Asn
 85 90 95

<210> 2883
 <211> 516
 <212> DNA
 <213> Homo sapiens

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 420
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<210> 2884
 <211> 172
 <212> PRT
 <213> Homo sapiens

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 Pro Ser Ser Val Asp Thr Tyr Pro Tyr Gly Leu Pro Thr Pro Pro Glu
 35 40 45
 Met Ser Pro Leu Asp Val Leu Glu Pro Glu Gln Thr Phe Phe Ser Ser
 50 55 60
 Pro Cys Gln Glu Glu His Gly His Pro Arg Arg Ile Pro His Leu Pro
 65 70 75 80
 Gly His Pro Tyr Ser Pro Glu Tyr Ala Pro Ser Pro Leu His Cys Ser
 85 90 95
 His Pro Leu Gly Ser Leu Ala Leu Gly Gln Ser Pro Gly Val Ser Met
 100 105 110
 Met Ser Pro Val Pro Gly Cys Pro Pro Ser Pro Ala Tyr Tyr Ser Pro
 115 120 125
 Ala Thr Tyr His Pro Leu His Ser Asn Leu Gln Ala His Leu Gly Gln
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 Leu Ser Pro Pro Pro Glu His Pro Gly Phe Asp Ala Leu Asp Gln Leu
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<210> 2885
 <211> 807
 <212> DNA
 <213> Homo sapiens

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 180
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 300

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 420
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<210> 2886

<211> 269

<212> PRT

<213> Homo sapiens

<400> 2886

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			20					25					30		
Gly	Arg	Asp	Ala	Glu	Thr	Leu	Gln	Lys	Gln	Lys	Glu	Thr	Ile	Lys	Ala
			35				40						45		
Phe	Leu	Lys	Lys	Leu	Glu	Ala	Leu	Ile	Ala	Ser	Asn	Asp	Asn	Ala	Asn
			50			55					60				
Lys	Thr	Cys	Lys	Met	Met	Leu	Ala	Thr	Glu	Glu	Thr	Ser	Pro	Asp	Leu
65				70					75					80	
Val	Gly	Ile	Lys	Arg	Asp	Leu	Glu	Ala	Leu	Ser	Lys	Gln	Cys	Asn	Lys
			85					90						95	
Leu	Leu	Asp	Arg	Ala	Gln	Ala	Arg	Glu	Glu	Gln	Val	Glu	Gly	Thr	Ile
			100					105					110		
Lys	Arg	Leu	Glu	Glu	Phe	Tyr	Ser	Lys	Leu	Lys	Glu	Phe	Ser	Ile	Leu
			115				120					125			
Leu	Gln	Lys	Ala	Glu	Glu	His	Glu	Glu	Ser	Gln	Gly	Pro	Val	Gly	Met
			130			135					140				
Glu	Thr	Glu	Thr	Ile	Asn	Gln	Gln	Leu	Asn	Met	Phe	Lys	Val	Phe	Gln
145				150					155					160	
Lys	Glu	Glu	Ile	Glu	Pro	Leu	Gln	Gly	Lys	Gln	Gln	Asp	Val	Asn	Trp
			165					170						175	
Leu	Gly	Gln	Gly	Leu	Ile	Gln	Ser	Ala	Ala	Lys	Ser	Thr	Ser	Thr	Gln
			180					185					190		
Gly	Leu	Glu	His	Asp	Leu	Asp	Asp	Val	Asn	Ala	Arg	Trp	Lys	Thr	Leu
			195			200					205				
Asn	Lys	Lys	Val	Ala	Gln	Arg	Ala	Ala	Gln	Leu	Gln	Glu	Ala	Leu	Leu
			210			215					220				
His	Cys	Gly	Arg	Phe	Gln	Asp	Ala	Leu	Glu	Ser	Leu	Leu	Ser	Trp	Met

225		230		235		240									
Val	Asp	Thr	Glu	Glu	Leu	Val	Ala	Asn	Gln	Lys	Pro	Pro	Ser	Ala	Glu
			245						250					255	
Phe	Lys	Val	Val	Lys	Asp	Lys	Ile	Gln	Glu	Gln	Lys	Leu			
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<210> 2887

<211> 1945

<212> DNA

<213> Homo sapiens

<400> 2887

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1260

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<210> 2888

<211> 315

<212> PRT

<213> Homo sapiens

<400> 2888

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			20					25					30		
Thr	Arg	Ser	Met	Leu	Lys	Met	Thr	Thr	Ser	Ile	Asn	Arg	Arg	Ser	Arg
		35				40						45			
Thr	Ser	Thr	Lys	Ser	Thr	Arg	Thr	Ser	Ala	Arg	Pro	Gly	Leu	Thr	Ala
	50					55					60				
Thr	Val	Ser	Ile	Gly	Leu	Ser	Asp	Ser	Pro	Thr	Trp	Arg	His	Cys	Trp
65					70					75				80	
Met	Thr	Ala	Arg	Ser	Cys	Ser	Gly	Glu	Lys	Gly	Gly	His	Trp	Ala	Pro
			85					90					95		
Arg	Gln	Val	Gly	Val	Tyr	Leu	Leu	Pro	Gly	Arg	Val	Gly	Cys	Val	Ser
		100						105				110			
Ser	Arg	Val	Ser	Pro	Ser	Phe	Pro	Gly	Asp	Gly	Leu	Asp	Ser	Gly	Leu
		115				120					125				
Ala	Arg	Arg	Gly	Ser	Ala	Val	Ser	Ala	Leu	Ala	Ser	Gly	Leu	Val	Glu
	130				135						140				
Glu	Pro	Met	Leu	Gly	Pro	Pro	Phe	His	Pro	Thr	Pro	Arg	Phe	Lys	Ala
145					150					155				160	
Val	Ser	Ala	Lys	Ser	Lys	Glu	Asp	Leu	Val	Ser	Gln	Gly	Phe	Thr	Glu
			165					170					175		
Phe	Thr	Ile	Glu	Asp	Phe	His	Asn	Thr	Phe	Met	Asp	Leu	Ile	Glu	Gln

				180					185					190		
Val	Glu	Lys	Gln	Thr	Ser	Val	Ala	Asp	Leu	Leu	Ala	Ser	Phe	Asn	Asp	
		195					200					205				
Gln	Ser	Thr	Ser	Asp	Tyr	Leu	Val	Val	Tyr	Leu	Arg	Leu	Leu	Thr	Ser	
	210					215					220					
Gly	Tyr	Leu	Gln	Arg	Glu	Ser	Lys	Phe	Phe	Glu	His	Phe	Ile	Glu	Gly	
225					230					235					240	
Gly	Arg	Thr	Val	Lys	Glu	Phe	Cys	Gln	Gln	Glu	Val	Glu	Pro	Met	Cys	
				245					250					255		
Lys	Glu	Ser	Asp	His	Ile	His	Ile	Ile	Ala	Leu	Ala	Gln	Ala	Leu	Ser	
			260					265					270			
Val	Ser	Ile	Gln	Val	Glu	Tyr	Met	Asp	Arg	Gly	Glu	Gly	Gly	Thr	Thr	
		275					280					285				
Asn	Pro	His	Ile	Phe	Pro	Glu	Gly	Ser	Glu	Pro	Lys	Val	Tyr	Leu	Leu	
	290					295					300					
Tyr	Arg	Pro	Gly	His	Tyr	Asp	Ile	Leu	Tyr	Lys						
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<210> 2889
<211> 614
<212> DNA
<213> Homo sapiens
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<210> 2890
<211> 204
<212> PRT
<213> Homo sapiens
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Pro Glu Val	Lys Leu Pro Arg Ala	Pro Glu Val Gln Leu	Lys Ala Thr
35	40	45	
Lys Ala Glu	Gln Ala Glu Gly Met	Glu Phe Gly Phe Lys	Met Pro Lys
50	55	60	
Met Thr Met	Pro Lys Leu Gly Arg Ala	Glu Ser Pro Ser Arg	Gly Lys
65	70	75	80
Pro Gly Glu	Ala Gly Ala Glu Val	Ser Gly Lys Leu Val	Thr Leu Pro
85	90	95	
Cys Leu Gln	Pro Glu Val Asp Gly	Glu Ala His Val Gly	Val Pro Ser
100	105	110	
Leu Thr Leu	Pro Ser Val Glu Leu	Asp Leu Pro Gly	Ala Leu Gly
115	120	125	
Gln Gly Gln	Val Pro Ala Ala	Lys Met Gly Lys	Gly Glu Arg
130	135	140	
Gly Pro Glu	Val Ala Ala Gly	Val Arg Glu Val	Gly Phe Arg
145	150	155	160
Ser Val Glu	Ile Val Thr Pro	Gln Leu Pro Ala	Val Glu Ile
165	170	175	
Gly Arg Leu	Glu Met Ile Glu Thr	Lys Val Lys Pro	Ser Ser Lys
180	185	190	
Ser Leu Pro	Lys Phe Gly Leu	Ser Gly Pro	Lys Val
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<210> 2891

<211> 565

<212> DNA

<213> Homo sapiens

<400> 2891

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565

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<210> 2892

<211> 90
 <212> PRT
 <213> Homo sapiens

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 Ser Thr Ser Tyr Arg Lys Ala Leu Pro Ile Leu Arg Pro Ser Ser Arg
 35 40 45
 Arg Glu Ala Gly Pro Leu His His Ile Asp Leu Arg Arg Cys Phe Ser
 50 55 60
 Arg Leu Gly Arg Gly Ala Asp Phe Ala Val Cys Ala Lys Glu Pro Val
 65 70 75 80
 Ser Asp Asn Pro Ile Phe Leu Leu Ile Thr
 85 90

<210> 2893
 <211> 2270
 <212> DNA
 <213> Homo sapiens

<400> 2893
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<210> 2894

<211> 490

<212> PRT

<213> Homo sapiens

<400> 2894

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Gln	Val	Ser	Val	Ser	Leu	His	Pro	Gly	Thr	Gly	Leu	Phe	Ser	Pro	Phe
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Cys	Ser	Val	Pro	Leu	Trp	Cys	Ile	Tyr	Phe	Leu	Ser	Phe	Cys	Ile	Val
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Phe	Leu	Asn	Leu	Asp	Cys	Pro	Cys	Leu	Phe	Leu	Cys	His	Ser	Leu	Ser
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Thr	Asp	Val	Arg	Phe	Ala	Asn	Met	Leu	Gly	Gln	Pro	Gly	Ser	Thr	Pro
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Leu	Asp	Leu	Phe	Lys	Phe	Tyr	Val	Glu	Glu	Leu	Lys	Ala	Arg	Phe	His
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Asp	Glu	Lys	Lys	Ile	Ile	Lys	Asp	Ile	Leu	Lys	Asp	Arg	Gly	Phe	Cys
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Val	Glu	Val	Asn	Thr	Ala	Phe	Glu	Asp	Phe	Ala	His	Val	Ile	Ser	Phe
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Gly	Lys	Lys	His	His	His	Lys	Arg	Ser	His	Ser	Pro	Ser	Gly	Ser	Glu
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Pro	Lys	Lys	Lys	Thr	Lys	Lys	Arg	Arg	His	Lys	Ser	Asn	Ser	Pro	Glu
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Ser	Glu	Thr	Asp	Pro	Glu	Glu	Lys	Ala	Gly	Lys	Glu	Ser	Asp	Glu	Lys
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Glu	Gln	Glu	Gln	Asp	Lys	Asp	Arg	Glu	Leu	Gln	Gln	Ala	Glu	Leu	Pro

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Thr	Ser	Glu	Ser	Glu	Leu	Ser	Glu	Gly	Glu	Leu	Glu	Arg	Arg	Arg	Arg	
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Thr	Leu	Leu	Gln	Gln	Leu	Asp	Asp	His	Gln							
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<212> DNA
<213> Homo sapiens
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<213> Homo sapiens
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His  Met  Pro  Cys  Pro  Gly  Cys  Cys  Gly  Lys  Ala  Arg  Pro  Pro  Arg  Pro
      20              25              30
Pro  Leu  Arg  Gly  Pro  Ser  Ala  Thr  Ser  Ser  Cys  Arg  Gly  Gly  Asn  Ala
      35              40              45
Pro  Gln  Gly  Leu  Gln  Lys  Gly  Gly  Gly  Glu  Ala  Pro  Val  Leu  Leu  Leu
 50              55              60
Gln  Glu  Leu  Ala  Gln  Asp  Ala  Val  Ala  Pro  Ala  Val  Ala  Arg  Arg  Ser

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				85					90				95	
Leu	Pro	Pro	Asp	Arg	Pro	Arg	Pro	Pro	Ala	Arg	Arg	His	Ser	Phe
			100					105				110		
Gly	Pro	Ala	Leu	Arg	Ser	Gly	Pro	Pro	Leu	Pro	Pro	Pro	Arg	Arg
		115					120				125			
Pro	Leu	Leu	Arg	Pro	Pro	Val	Ala	Ala	Ala	Leu	Pro	Pro	Gln	Pro
	130					135					140			
Pro	Ser	Leu	Pro	Ala	Ser	Arg	Ala	His	Ser	Cys	Pro	Gly	Arg	Pro
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<210> 2897

<211> 3184

<212> DNA

<213> Homo sapiens

<400> 2897

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<210> 2898

<211> 933

<212> PRT

<213> Homo sapiens

<400> 2898

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			20					25					30		
Asn	Glu	Cys	Val	Gln	Cys	Glu	Phe	Asn	Phe	Ile	Asn	Thr	Gly	Lys	Phe
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Thr	Phe	Ser	Phe	Gln	Ala	Gln	Leu	Cys	Gly	Ser	Lys	Thr	Leu	Leu	Gln
		50				55					60				
Tyr	Leu	Glu	Phe	Ser	Pro	Ile	Asp	Ser	Thr	Val	Asp	Val	Gly	Gln	Ser
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Val	His	Ala	Thr	Leu	Ser	Phe	Gln	Pro	Leu	Lys	Lys	Cys	Val	Leu	Thr
				85					90					95	
Asp	Leu	Glu	Leu	Ile	Ile	Lys	Ile	Ser	His	Gly	Pro	Thr	Phe	Met	Cys
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Asn	Ile	Ser	Gly	Cys	Ala	Val	Ser	Pro	Ala	Ile	His	Phe	Ser	Phe	Thr
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Ser	Tyr	Asn	Phe	Gly	Thr	Cys	Phe	Ile	Tyr	Gln	Ala	Gly	Met	Pro	Pro
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Tyr	Lys	Gln	Thr	Leu	Val	Ile	Thr	Asn	Lys	Glu	Glu	Thr	Pro	Met	Ser
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Ile	Asp	Cys	Leu	Tyr	Thr	Asn	Thr	Thr	His	Leu	Glu	Val	Asn	Ser	Arg
			165					170					175		
Val	Asp	Val	Val	Lys	Pro	Gly	Asn	Thr	Leu	Glu	Ile	Pro	Ile	Thr	Phe
			180					185					190		
Tyr	Pro	Arg	Glu	Ser	Ile	Asn	Tyr	Gln	Glu	Leu	Ile	Pro	Phe	Glu	Ile
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Ala Val Leu Pro Gly	Gln Val Val Lys Arg Thr Val Ser Ile Met Asn	240
	245	250
Asn Ser Leu Ala Gln	Leu Thr Phe Asn Gln Ser Ile Leu Phe Thr Ile	255
	260	265
Pro Glu Leu Gln Glu	Pro Lys Val Leu Thr Leu Ala Pro Phe His Asn	
	275	280
Ile Thr Leu Lys Pro	Lys Glu Val Cys Lys Leu Glu Val Ile Phe Ala	285
	290	295
Pro Lys Lys Arg Val	Pro Phe Ser Glu Glu Val Phe Met Glu Cys	300
305	310	315
Met Gly Leu Leu Arg	Pro Leu Phe Leu Leu Ser Gly Cys Cys Gln Ala	320
	325	330
Leu Glu Ile Ser Leu	Asp Gln Glu His Ile Pro Phe Gly Pro Val Val	335
	340	345
Tyr Gln Thr Gln Ala	Thr Arg Arg Ile Leu Met Leu Asn Thr Gly Asp	350
	355	360
Val Gly Ala Arg Phe	Lys Trp Asp Ile Lys Lys Phe Glu Pro His Phe	365
	370	375
Ser Ile Ser Pro Glu	Glu Gly Tyr Ile Thr Ser Gly Met Glu Val Ser	380
385	390	395
Phe Glu Val Thr Tyr	His Pro Thr Glu Val Gly Lys Glu Ser Leu Cys	400
	405	410
Lys Asn Ile Leu Cys	Tyr Ile Gln Gly Gly Ser Pro Leu Ser Leu Thr	415
	420	425
Leu Ser Gly Val Cys	Val Gly Pro Pro Ala Val Lys Glu Val Val Asn	430
	435	440
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	450	455
Asn Arg Thr Asn Gln	Thr Trp Asn Leu His Pro Ile Phe Glu Gly Glu	460
465	470	475
His Trp Glu Gly Pro	Glu Phe Ile Thr Leu Glu Ala His Gln Gln Asn	480
	485	490
Lys Pro Tyr Glu Ile	Thr Tyr Arg Pro Arg Thr Met Asn Leu Glu Asn	495
	500	505
Arg Lys His Gln Gly	Thr Leu Phe Phe Pro Leu Pro Asp Gly Thr Gly	510
	515	520
Trp Leu Tyr Ala Leu	His Gly Thr Ser Glu Leu Pro Lys Ala Val Ala	525
	530	535
Asn Ile Tyr Arg Glu	Val Pro Cys Lys Thr Pro Tyr Thr Glu Leu Leu	540
545	550	555
Pro Ile Thr Asn Trp	Leu Asn Lys Pro Gln Arg Phe Arg Val Ile Val	560
	565	570
Glu Ile Leu Lys Pro	Glu Lys Pro Asp Leu Ser Ile Thr Met Lys Gly	575
	580	585
Leu Asp Tyr Ile Asp	Val Leu Ser Gly Ser Lys Lys Asp Tyr Lys Leu	590
	595	600
Asn Phe Phe Ser His	Lys Glu Gly Thr Tyr Ala Ala Lys Val Ile Phe	605
	610	615
Arg Asn Glu Val Thr	Asn Glu Phe Leu Tyr Tyr Asn Val Ser Phe Arg	620
625	630	635
Val Ile Pro Ser Gly	Ile Ile Lys Thr Ile Glu Met Val Thr Pro Val	640

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Ser	Val	Thr	Phe	Ser	Thr	Glu	Cys	Arg	Met	Pro	Asp	Ile	Ala	Leu	Pro			
			675					680					685					
Ser	Gln	Phe	Val	Val	Pro	Ala	Asn	Ser	Glu	Gly	Thr	Phe	Ser	Phe	Glu			
			690					695					700					
Phe	Gln	Pro	Leu	Lys	Ala	Gly	Glu	Thr	Phe	Gly	Arg	Leu	Thr	Leu	His			
705				710					715					720				
Asn	Thr	Asp	Leu	Gly	Tyr	Tyr	Gln	Tyr	Glu	Leu	Tyr	Leu	Lys	Ala	Thr			
			725					730					735					
Pro	Ala	Leu	Pro	Glu	Lys	Pro	Val	His	Phe	Gln	Thr	Val	Leu	Gly	Ser			
			740					745					750					
Ser	Gln	Ile	Ile	Leu	Val	Lys	Phe	Ile	Asn	Tyr	Thr	Arg	Gln	Arg	Thr			
			755					760					765					
Glu	Tyr	Tyr	Cys	Arg	Thr	Asp	Cys	Thr	Asp	Phe	His	Ala	Glu	Lys	Leu			
			770					775					780					
Ile	Asn	Ala	Ala	Pro	Gly	Gly	Gln	Gly	Gly	Thr	Glu	Ala	Ser	Val	Glu			
785				790					795					800				
Val	Leu	Phe	Glu	Pro	Ser	His	Leu	Gly	Glu	Thr	Lys	Gly	Ile	Leu	Ile			
			805					810					815					
Leu	Ser	Ser	Leu	Ala	Gly	Gly	Glu	Tyr	Ile	Ile	Pro	Leu	Phe	Gly	Met			
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Ala	Leu	Pro	Pro	Lys	Pro	Gln	Gly	Pro	Phe	Ser	Ile	Arg	Ala	Gly	Tyr			
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Ser	Ile	Ile	Ile	Pro	Phe	Lys	Asn	Val	Phe	Tyr	His	Met	Val	Thr	Phe			
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Ser	Ile	Ile	Val	Asp	Asn	Pro	Ala	Phe	Thr	Ile	Arg	Ala	Gly	Glu	Ser			
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Pro	Ser	Gly	Ser	Lys	Thr	Pro	Ile	Thr	Thr	Lys	Leu	Thr	Val	Ser	Cys			
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Pro	Pro	Gly	Glu	Gly	Ser	Glu	Thr	Gly	Val	Lys	Trp	Val	Tyr	Tyr	Leu			
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<210> 2899

<211> 876

<212> DNA

<213> Homo sapiens

<400> 2899

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300

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 780
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<210> 2900

<211> 189

<212> PRT

<213> Homo sapiens

<400> 2900

Met	Thr	Val	Val	Glu	Ala	Asp	Asp	Asp	Lys	Lys	Arg	Leu	Leu	Gln
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Ile	Ile	Asp	Arg	Asp	Gly	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Pro	Leu
		20					25					30		
Asp	Glu	Ser	Ser	Val	Lys	Lys	Met	Ile	Leu	Thr	Phe	Glu	Lys	Arg
	35					40					45			Ser
Tyr	Lys	Asn	Gln	Glu	Leu	Arg	Ile	Lys	Phe	Pro	Asp	Asn	Pro	Glu
	50				55					60				Lys
Phe	Met	Glu	Ser	Glu	Leu	Asp	Leu	Asn	Asp	Ile	Ile	Gln	Glu	Met
65				70					75					80
Val	Val	Ala	Thr	Met	Pro	Asp	Leu	Tyr	His	Leu	Leu	Val	Glu	Leu
			85					90					95	Asn
Ala	Val	Gln	Ser	Leu	Leu	Gly	Leu	Leu	Gly	His	Asp	Asn	Thr	Asp
	100						105						110	Val
Ser	Ile	Ala	Val	Val	Asp	Leu	Leu	Gln	Glu	Leu	Thr	Asp	Ile	Asp
	115					120					125			Thr
Leu	His	Glu	Ser	Glu	Glu	Gly	Ala	Glu	Val	Leu	Ile	Asp	Ala	Leu
	130				135						140			Val
Asp	Gly	Gln	Val	Val	Ala	Leu	Leu	Val	Gln	Asn	Leu	Glu	Arg	Leu
145				150					155					160
Glu	Ser	Val	Lys	Glu	Glu	Ala	Asp	Gly	Val	His	Asn	Thr	Leu	Ala
			165					170						175
Val	Glu	Asn	Met	Ala	Glu	Phe	Arg	Pro	Glu	Met	Cys	Thr		
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<210> 2901

<211> 756

<212> DNA

<213> Homo sapiens

<400> 2901

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 180
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 480
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 540
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<210> 2902

<211> 158

<212> PRT

<213> Homo sapiens

<400> 2902

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Ala	Glu	Glu	Gly	Pro	Pro	Val	Gln	Ser	Leu	Lys	Gly	Glu	Asp	Ala	Glu
			20				25						30		
Glu	Ser	Leu	Glu	Glu	Glu	Glu	Ala	Leu	Asp	Pro	Leu	Gly	Ile	Met	Arg
		35				40						45			
Ser	Lys	Lys	Pro	Lys	Lys	His	Pro	Lys	Val	Ala	Val	Lys	Ala	Lys	Pro
	50				55					60					
Ser	Pro	Arg	Leu	Thr	Ile	Phe	Asp	Glu	Glu	Val	Asp	Pro	Asp	Glu	Gly
65				70					75					80	
Leu	Phe	Gly	Pro	Gly	Arg	Lys	Leu	Ser	Pro	Gln	Asp	Pro	Ser	Glu	Asp
			85					90						95	
Val	Ser	Ser	Met	Asp	Pro	Leu	Lys	Leu	Phe	Asp	Asp	Pro	Asp	Leu	Gly
			100					105					110		
Gly	Ala	Ile	Pro	Leu	Gly	Asp	Ser	Leu	Leu	Leu	Pro	Ala	Ala	Cys	Glu
		115				120						125			
Ser	Gly	Gly	Pro	Thr	Pro	Ser	Leu	Ser	His	Arg	Asp	Ala	Ser	Lys	Glu

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 145 150 155

<210> 2903
 <211> 542
 <212> DNA
 <213> Homo sapiens

<400> 2903
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 120
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 180
 aagccctact acgagggtgcg gctggcttct gtgcttggct cagagccttc cctggactct
 240
 gaggtgactt ccaagctgaa gagctatgaa ttccggggaa gccctttcca ggtgacccgg
 300
 ggggactacg cgcccatcct ccagaagggtg gtggagcagc tggagaaagc caaggcctat
 360
 gcagccaaca gccaccaggg gcagatgctg gcccagtata tagagagctt caccaggggc
 420
 tccatcgagg cccacaagag gggctcccg cttctggatcc aggacaaagg ccccatcgt
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 540
 gt
 542

<210> 2904
 <211> 180
 <212> PRT
 <213> Homo sapiens

<400> 2904
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 1 5 10 15
 Lys Glu Gly Ile Thr Thr Tyr Phe Ser Gly Asn Cys Thr Met Glu Asp
 20 25 30
 Ala Lys Leu Ala Gln Asp Phe Leu Asp Ser Gln Asn Leu Ser Ala Tyr
 35 40 45
 Asn Thr Arg Leu Phe Lys Glu Val Asp Gly Glu Gly Lys Pro Tyr Tyr
 50 55 60
 Glu Val Arg Leu Ala Ser Val Leu Gly Ser Glu Pro Ser Leu Asp Ser
 65 70 75 80
 Glu Val Thr Ser Lys Leu Lys Ser Tyr Glu Phe Arg Gly Ser Pro Phe
 85 90 95
 Gln Val Thr Arg Gly Asp Tyr Ala Pro Ile Leu Gln Lys Val Val Glu
 100 105 110
 Gln Leu Glu Lys Ala Lys Ala Tyr Ala Ala Asn Ser His Gln Gly Gln
 115 120 125
 Met Leu Ala Gln Tyr Ile Glu Ser Phe Thr Gln Gly Ser Ile Glu Ala

130		135		140
His Lys Arg Gly Ser Arg Phe Trp Ile Gln Asp Lys Gly Pro His Arg				
145		150		155
Gly Glu Val Arg Arg Gln Leu His Pro Thr Cys Pro Leu Leu Pro Ala				
	165		170	175
Pro Pro Ser Arg				
	180			

<210> 2905

<211> 814

<212> DNA

<213> Homo sapiens

<400> 2905

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120
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180
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240
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300
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360
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480
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720
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<210> 2906

<211> 200

<212> PRT

<213> Homo sapiens

<400> 2906

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20 25 30
Thr Leu Phe Gln Asn Trp Val Ser Gly Phe Leu Leu Cys Pro Gly Phe

	35					40					45				
Gly	Lys	Gly	Ile	Leu	Pro	Leu	Met	Leu	Asp	Gly	Pro	Glu	Thr	Ala	Pro
	50					55					60				
Pro	Trp	Ala	His	Tyr	Thr	Gly	Thr	Ser	Phe	Lys	Leu	Pro	Cys	Ser	Thr
65						70				75				80	
Arg	Arg	Ala	Pro	Gln	Pro	Arg	Thr	Thr	Glu	Gln	Met	Met	Ala	Arg	Arg
				85					90				95		
Pro	Gln	Asn	Pro	Asp	Arg	Pro	Ser	Trp	Leu	Ala	Leu	Ala	Asp	Ala	Thr
			100					105					110		
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<210> 2909

<211> 2420

<212> DNA

<213> Homo sapiens

<400> 2909

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120
cattggggccc ctgtgagcgg gacggtggct gagaccgcct gctgtggctt tgcgagttct
180
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480
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960
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1080

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1260
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<210> 2910

<211> 153

<212> PRT

<213> Homo sapiens

<400> 2910

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		20						25				30			
Thr	Glu	Pro	Pro	Val	Phe	Cys	Leu	Arg	Ala	Ser	Phe	Met	Ala	Trp	Thr
		35					40				45				
Gly	Asn	Ala	Met	Cys	Ser	His	Lys	Cys	Thr	Thr	Ile	Val	His	Gln	His
	50					55					60				
Leu	Tyr	Asn	Ile	Lys	Gly	Val	Ile	Tyr	Lys	Ser	Thr	Ala	Ile	Val	His
65					70				75					80	
Arg	Met	Val	Met	Ala	Gly	Glu	Pro	Arg	Pro	Pro	Val	Leu	Cys	Ser	Phe
			85					90					95		
Ser	Thr	Gly	Glu	His	Leu	Gly	Ser	Cys	His	Lys	Ala	Arg	Gly	Gly	Pro
		100						105					110		
Ser	Leu	Gly	Leu	Ser	Trp	Gly	Arg	Gln	Gln	Val	Cys	Lys	Asp	Ser	Ser
	115					120					125				
Gly	Pro	Val	Leu	Thr	Gly	Ile	Arg	Gly	Gln	Glu	Arg	Gln	Val	Cys	Leu
	130				135						140				
Cys	Leu	Gly	Leu	Ile	Gly	Arg	Leu	Val							
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<210> 2911

<211> 1327

<212> DNA

<213> Homo sapiens

<400> 2911

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780
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840

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 1200
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<210> 2912

<211> 350

<212> PRT

<213> Homo sapiens

<400> 2912

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Ala	Ala	Glu	Pro	Gly	Lys	Arg	Ser	Glu	Gly	Gly	Lys	Thr	Pro	Val	Ala
			20					25					30		
Arg	Ser	Ser	Gly	Gly	Gly	Gly	Trp	Ala	Asp	Pro	Arg	Thr	Cys	Leu	Ser
		35					40					45			
Leu	Leu	Ser	Leu	Gly	Thr	Cys	Leu	Gly	Leu	Ala	Trp	Phe	Val	Phe	Gln
	50					55					60				
Gln	Ser	Glu	Lys	Phe	Ala	Lys	Val	Glu	Asn	Gln	Tyr	Gln	Leu	Leu	Lys
65					70					75					80
Leu	Glu	Thr	Asn	Glu	Phe	Gln	Gln	Leu	Gln	Ser	Lys	Ile	Ser	Leu	Ile
			85						90					95	
Ser	Glu	Lys	Trp	Gln	Lys	Ser	Glu	Ala	Ile	Met	Glu	Gln	Leu	Lys	Ser
			100					105					110		
Phe	Gln	Ile	Ile	Ala	His	Leu	Lys	Arg	Leu	Gln	Glu	Glu	Ile	Asn	Glu
		115					120					125			
Val	Lys	Thr	Trp	Ser	Asn	Arg	Ile	Thr	Glu	Lys	Gln	Asp	Ile	Leu	Asn
		130				135					140				
Asn	Ser	Leu	Thr	Thr	Leu	Ser	Gln	Asp	Ile	Thr	Lys	Val	Asp	Gln	Ser
145					150					155					160
Thr	Thr	Ser	Met	Ala	Lys	Asp	Val	Gly	Leu	Lys	Ile	Thr	Ser	Val	Lys
			165					170						175	
Thr	Asp	Ile	Arg	Arg	Ile	Ser	Gly	Leu	Val	Thr	Asp	Val	Ile	Ser	Leu
		180					185						190		
Thr	Asp	Ser	Val	Gln	Glu	Leu	Glu	Asn	Lys	Ile	Glu	Lys	Val	Glu	Lys
		195					200					205			
Asn	Thr	Val	Lys	Asn	Ile	Gly	Asp	Leu	Leu	Ser	Ser	Ser	Ile	Asp	Arg
	210					215					220				
Thr	Ala	Thr	Leu	Arg	Lys	Thr	Ala	Ser	Glu	Asn	Ser	Gln	Arg	Ile	Asn


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225                230                235                240
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Thr Asp Arg Phe Leu Ser Leu Glu Gly Asp Arg Ala Lys Val Leu Lys
                260                265                270
Thr Val Thr Phe Ala Asn Asp Leu Lys Pro Lys Val Tyr Asn Leu Lys
                275                280                285
Lys Asp Phe Ser Arg Leu Glu Pro Leu Val Asn Asp Leu Thr Leu Arg
                290                295                300
Ile Gly Arg Leu Val Thr Asp Leu Leu Gln Arg Glu Lys Glu Ile Ala
305                310                315                320
Phe Leu Ser Glu Lys Ile Ser Asn Leu Thr Ile Val Gln Ala Glu Ile
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Lys Asp Ile Lys Asp Glu Ile Ala His Ile Ser Asp Met Asn
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<210> 2913
 <211> 361
 <212> DNA
 <213> Homo sapiens

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<400> 2913
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361

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<210> 2914
 <211> 112
 <212> PRT
 <213> Homo sapiens

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<400> 2914
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                20                25                30
Cys Asn Met Glu Ile Gly Ile Ile Ile Arg Asn Gly Ser Gln Asp Gly
                35                40                45
Pro Glu Pro Ser Ile Ser Gly Leu Lys Lys Leu His Pro Gln Leu Ser
                50                55                60
Leu Ser Glu Asp Val His Ala Pro Gln Val Ala Asn Asp Thr Glu Ala
65                70                75                80
Gly Arg Lys Leu Asp Val Gly Pro Gln Leu Leu Asp Gln Leu Ala Gln

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	85		90		95
His Gln Leu	His Gly Leu Ala	His Phe Val	His Asp Ala	Leu Asp Asp	
	100		105		110

<210> 2915
 <211> 1782
 <212> DNA
 <213> Homo sapiens

<400> 2915
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<210> 2916

<211> 519

<212> PRT

<213> Homo sapiens

<400> 2916

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			20					25				30			
Ile	Gln	Glu	Val	Glu	Leu	Lys	Ala	Ser	Ala	Ala	Asp	Arg	Glu	Ile	Tyr
		35					40					45			
Leu	Leu	Arg	Thr	Ser	Leu	His	Arg	Glu	Arg	Glu	Gln	Ala	Gln	Gln	Leu
	50					55					60				
His	Gln	Leu	Leu	Ala	Leu	Lys	Glu	Gln	Glu	His	Arg	Lys	Glu	Leu	Glu
65					70					75					80
Thr	Arg	Glu	Phe	Phe	Thr	Asp	Ala	Asp	Phe	Gln	Asp	Ala	Leu	Ala	Lys
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Glu	Ile	Ala	Lys	Glu	Glu	Lys	Lys	His	Glu	Gln	Met	Ile	Lys	Glu	Tyr
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Gln	Glu	Lys	Ile	Asp	Val	Leu	Ser	Gln	Gln	Tyr	Met	Asp	Leu	Glu	Asn
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Glu	Phe	Arg	Ile	Ala	Leu	Thr	Val	Glu	Ala	Arg	Arg	Phe	Gln	Asp	Val
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Lys	Asp	Gly	Phe	Glu	Asn	Val	Ala	Thr	Glu	Leu	Ala	Lys	Ser	Lys	His
145					150					155					160
Ala	Leu	Ile	Trp	Ala	Gln	Arg	Lys	Glu	Asn	Glu	Ser	Ser	Ser	Leu	Ile
			165					170						175	
Lys	Asp	Leu	Thr	Cys	Met	Val	Lys	Glu	Gln	Lys	Thr	Lys	Leu	Ala	Glu
		180						185					190		
Val	Ser	Lys	Leu	Lys	Gln	Glu	Thr	Ala	Ala	Asn	Leu	Gln	Asn	Gln	Ile
		195					200					205			
Asn	Thr	Leu	Glu	Ile	Leu	Ile	Glu	Asp	Asp	Lys	Gln	Lys	Ser	Ile	Gln
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	275		280		285										
Arg	Lys	Thr	Asn	Glu	Ser	Asp	Ser	Asp	Ala	Leu	Arg	Ile	Lys	Cys	Lys
	290		295		300										
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		325		330		335									
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	340		345		350										
Asp	Glu	Val	Leu	Glu	Lys	Leu	Glu	Arg	His	Asn	Glu	Arg	Lys	Glu	Lys
	355		360		365										
Leu	Lys	Gln	Gln	Leu	Lys	Gly	Lys	Glu	Val	Glu	Leu	Glu	Glu	Ile	Arg
	370		375		380										
Lys	Ala	Tyr	Ser	Thr	Leu	Asn	Arg	Lys	Trp	His	Asp	Lys	Gly	Glu	Leu
385			390		395										400
Leu	Cys	His	Leu	Glu	Thr	Gln	Val	Lys	Glu	Val	Lys	Glu	Lys	Phe	Glu
		405		410		415									
Asn	Lys	Glu	Lys	Lys	Leu	Lys	Ala	Glu	Arg	Asp	Lys	Ser	Ile	Glu	Leu
	420		425		430										
Gln	Lys	Asn	Ala	Met	Glu	Lys	Leu	His	Ser	Met	Asp	Asp	Ala	Phe	Lys
	435		440		445										
Arg	Gln	Val	Asp	Ala	Ile	Val	Glu	Ala	His	Gln	Ala	Glu	Ile	Ala	Gln
	450		455		460										
Leu	Ala	Asn	Glu	Lys	Gln	Lys	Cys	Ile	Asp	Ser	Ala	Asn	Leu	Lys	Val
465			470		475										480
His	Gln	Ile	Glu	Lys	Glu	Met	Arg	Glu	Leu	Leu	Glu	Glu	Thr	Cys	Lys
		485		490		495									
Asn	Lys	Lys	Thr	Met	Glu	Ala	Lys	Ile	Lys	Gln	Leu	Ala	Phe	Ala	Leu
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Asn	Glu	Ile	Gln	Gln	Asp	Met									
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<210> 2917

<211> 2636

<212> DNA

<213> Homo sapiens

<400> 2917

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420

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<210> 2918

<211> 509

<212> PRT

<213> Homo sapiens

<400> 2918

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			20					25					30		
Met	Asp	Glu	Leu	Val	Pro	Leu	Gly	Glu	Leu	Thr	Lys	His	Ser	Thr	Ser
	35						40					45			
Ala	Val	Asp	Leu	Ser	Thr	Xaa	Phe	Ala	Gln	Ile	Ser	His	Thr	Ala	Arg
	50					55					60				
Gln	Leu	Asp	Trp	Pro	Asp	Pro	Glu	Glu	Ala	Phe	Met	Ile	Thr	Val	Lys
65					70					75					80
Phe	Val	Glu	Asp	Thr	Cys	Arg	Leu	Ala	Leu	Val	Tyr	Cys	Ser	Leu	Ile
				85					90					95	
Lys	Ala	Arg	Ala	Arg	Glu	Leu	Ser	Ser	Gly	Gln	Lys	Asp	Gln	Gly	Gln
			100					105					110		
Ala	Ala	Asn	Met	Leu	Cys	Val	Val	Val	Asn	Asp	Met	Glu	Gln	Leu	Arg
		115					120					125			
Leu	Val	Ile	Gly	Lys	Leu	Pro	Ala	Gln	Leu	Ala	Trp	Glu	Ala	Leu	Glu
	130					135					140				
Gln	Arg	Val	Gly	Ala	Val	Leu	Glu	Gln	Gly	Gln	Leu	Gln	Asn	Thr	Leu
145					150					155					160
His	Ala	Gln	Leu	Gln	Ser	Ala	Leu	Ala	Gly	Leu	Gly	His	Glu	Ile	Arg
				165					170					175	
Thr	Gly	Val	Arg	Thr	Leu	Ala	Glu	Gln	Leu	Glu	Val	Gly	Ile	Ala	Lys
		180					185						190		
His	Ile	Gln	Lys	Leu	Val	Gly	Val	Arg	Glu	Ser	Val	Leu	Pro	Glu	Asp
	195						200					205			
Ala	Ile	Leu	Pro	Leu	Met	Lys	Phe	Leu	Glu	Val	Glu	Leu	Cys	Tyr	Met

210	215	220
Asn Thr Asn Leu Val Gln Glu Asn Phe Ser Ser Leu Leu Thr Leu Leu		
225	230	235
Trp Thr His Thr Leu Thr Val Leu Val Glu Ala Ala Ala Ser Gln Arg		240
	245	250
Ser Ser Ser Leu Ala Ser Asn Arg Leu Lys Ile Ala Leu Gln Asn Leu		255
	260	265
Glu Ile Cys Phe His Ala Glu Gly Cys Gly Leu Pro Pro Lys Ala Leu		270
	275	280
His Thr Ala Thr Phe Gln Ala Leu Gln Arg Asp Leu Glu Leu Gln Ala		285
	290	295
Ala Ser Ser Arg Glu Leu Ile Arg Lys Tyr Phe Cys Ser Arg Ile Gln		300
305	310	315
Gln Gln Ala Glu Thr Ser Glu Glu Leu Gly Ala Val Thr Val Lys		320
	325	330
Ala Ser Tyr Arg Ala Ser Glu Gln Lys Leu Arg Val Glu Leu Leu Ser		335
	340	345
Ala Ser Ser Leu Leu Pro Leu Asp Ser Asn Gly Ser Ser Asp Pro Phe		350
	355	360
Val Gln Leu Thr Leu Glu Pro Arg His Glu Phe Pro Glu Leu Ala Ala		365
	370	375
Arg Glu Thr Gln Lys His Lys Lys Asp Leu His Pro Leu Phe Asp Glu		380
385	390	395
Thr Phe Glu Phe Leu Val Pro Ala Glu Pro Cys Arg Lys Ala Gly Ala		400
	405	410
Cys Leu Leu Leu Thr Val Leu Asp Tyr Asp Thr Leu Gly Ala Asp Asp		415
	420	425
Leu Glu Gly Glu Ala Phe Leu Pro Leu Arg Glu Val Pro Gly Leu Ser		430
	435	440
Gly Ser Glu Glu Pro Gly Glu Val Pro Gln Thr Arg Leu Pro Leu Thr		445
	450	455
Tyr Pro Ala Pro Asn Gly Asp Pro Ile Leu Gln Leu Leu Glu Gly Arg		460
465	470	475
Lys Gly Asp Arg Glu Ala Gln Val Phe Val Arg Leu Arg Arg His Arg		480
	485	490
Ala Lys Gln Ala Ser Gln His Ala Leu Arg Pro Ala Pro		495
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<210> 2919

<211> 455

<212> DNA

<213> Homo sapiens

<400> 2919

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300

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<210> 2920
 <211> 143
 <212> PRT
 <213> Homo sapiens

<400> 2920
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 Arg Gln Val Ser Ser Leu Leu Thr Asn His Leu Ala Arg Ala Thr Glu
 35 40 45
 Cys Cys Gly Asn Gln Ala Ala Gly Asn Asp Ala Leu Gln Asp Val Leu
 50 55 60
 Ser Leu Leu Asn Asp Leu Ser Arg Ser His Ile Gly Lys Ala Ile Leu
 65 70 75 80
 Ser Gln Pro Ala Cys Val Ser Lys Leu Leu Ser Leu Leu Leu Asp Gln
 85 90 95
 Arg Pro Ser Pro Lys Leu Val Leu Ile Leu Gln Leu Cys Arg Ala
 100 105 110
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<210> 2921
 <211> 1855
 <212> DNA
 <213> Homo sapiens

<400> 2921
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1855

<210> 2922

<211> 452

<212> PRT

<213> Homo sapiens

<400> 2922

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Lys Ile Val Arg Ala Gln Gly Gln Tyr Met Tyr Asp Glu Gln Gly Ala			
35	40	45	
Glu Tyr Ile Asp Cys Ile Ser Asn Val Ala His Val Gly His Cys His			
50	55	60	
Pro Leu Val Val Gln Ala Ala His Glu Gln Asn Gln Val Leu Asn Thr			
65	70	75	80
Asn Ser Arg Tyr Leu His Asp Asn Ile Val Asp Tyr Ala Gln Arg Leu			
85	90	95	
Ser Glu Thr Leu Pro Glu Gln Leu Cys Val Phe Tyr Phe Leu Asn Ser			
100	105	110	
Gly Ser Glu Ala Asn Asp Leu Ala Leu Arg Leu Ala Arg His Tyr Thr			
115	120	125	
Gly His Gln Asp Val Val Val Leu Asp His Ala Tyr His Gly His Leu			
130	135	140	
Ser Ser Leu Ile Asp Ile Ser Pro Tyr Lys Phe Arg Asn Leu Asp Gly			
145	150	155	160
Gln Lys Glu Trp Val His Val Ala Pro Leu Pro Asp Thr Tyr Arg Gly			
165	170	175	
Pro Tyr Arg Xaa Arg Thr Thr Pro Thr Gln Leu Trp Xaa Tyr Ala Asn			
180	185	190	
Glu Val Lys Arg Val Val Ser Ser Ala Gln Glu Lys Gly Arg Lys Ile			
195	200	205	
Ala Ala Phe Phe Ala Glu Ser Leu Pro Ser Val Gly Gly Gln Ile Ile			
210	215	220	
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Asp Ile Val Thr Met Gly Lys Ser Ile Gly Asn Gly His Pro Val Ala			
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Cys Val Ala Ala Thr Gln Pro Val Ala Arg Ala Phe Glu Ala Thr Gly			
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Val Glu Tyr Phe Asn Thr Phe Gly Gly Ser Pro Val Ser Cys Ala Val			
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Gly Leu Ala Val Leu Asn Val Leu Glu Lys Glu Gln Leu Gln Asp His			
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Ile Arg His Pro Ile Val Gly Asp Val Arg Gly Val Gly Leu Phe Ile			
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Gly Val Asp Leu Ile Lys Asp Glu Ala Thr Arg Thr Pro Ala Thr Glu			
370	375	380	
Glu Ala Xaa Val Tyr Leu Val Ser Arg Leu Lys Glu Asn Tyr Val Leu			
385	390	395	400
Leu Ser Thr Asp Gly Pro Gly Arg Asn Ile Leu Lys Phe Lys Pro Pro			
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Met Cys Phe Ser Leu Asp Asn Ala Arg Gln Val Val Ala Lys Leu Asp			
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<212> DNA
<213> Homo sapiens

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<211> 91
<212> PRT
<213> Homo sapiens

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35 40 45
Arg Arg Thr Gly Ser Thr Ala Ala Pro Ala Ser Ala Pro Pro Ile Ala
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<211> 1999
<212> DNA
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<211> 305

<212> PRT

<213> Homo sapiens

<400> 2926

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<210> 2927

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<212> DNA

<213> Homo sapiens

<400> 2927

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 50 55 60
 Gln Asn Pro Leu Val Ser Glu Arg Leu Glu Leu Ser Val Leu Tyr Lys
 65 70 75 80
 Glu Tyr Ala Glu Asp Asp Asn Ile Tyr Gln Gln Lys Ile Lys Asp Leu
 85 90 95
 His Lys Lys Tyr Ser Tyr Ile Arg Lys Thr Arg Pro Asp Gly Asn Cys
 100 105 110
 Phe Tyr Arg Ala Phe Gly Phe Ser His Leu Glu Ala Leu Leu Asp Asp
 115 120 125
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 Ala Asp Leu Leu Ala Ser Phe Asn Asp Gln Ser Thr Ser Asp Tyr Leu
 180 185 190
 Val Val Tyr Leu Arg Leu Leu Thr Ser Gly Tyr Leu Gln Arg Glu Ser
 195 200 205
 Lys Phe Phe Glu His Phe Ile Glu Gly Gly Arg Thr Val Lys Glu Phe
 210 215 220
 Cys Gln Gln Glu Val Glu Pro Met Cys Lys Glu Ser Asp His Ile His
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 Ile Ile Ala Leu Ala Gln Ala Leu Ser Val Ser Ile Gln Val Glu Tyr
 245 250 255
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 <212> DNA
 <213> Homo sapiens

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 <212> PRT
 <213> Homo sapiens

<400> 2930

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 35          40          45
Gln Lys Glu Asn Met Ile Asp Lys Asp Val Glu Leu Ser Val Val Leu
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Ser Tyr Thr Ile Asp Leu Leu Ser Ala Glu Gln Asn His Ile Lys Phe
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225          230          235          240
Phe Ser Phe Phe Gln Arg Ser Lys Lys Lys Arg Asp Gln Thr Ala Ser
245          250          255
Ala Pro Ala Thr Pro Leu Val Asn Lys His Arg Pro Thr Phe Thr Arg
260          265          270
Ser Asn Thr Ile Ser Lys Pro Tyr Ile Ser Asn Thr Leu Pro Ser Asp
275          280          285
Ala Pro Lys Lys Arg Arg Ala Pro Leu Pro Pro Met Pro Ala Ser Gln
290          295          300
Ser Val Pro Gln Asp Leu Ala His Ile Gln Glu Arg Pro Ala Ser Cys
305          310          315          320
Ile Val Lys Ser Met Ser Val Asp Glu Thr Asp Lys Ser Pro Cys Glu
325          330          335
Ala Gly Arg Val Arg Ala Gly Ser Leu Gln Leu Ser Ser Met Ser Ala
340          345          350
Gly Asn Ser Ser Leu Arg Arg Thr Lys Arg Lys Ala Pro Ser Pro Pro
355          360          365
Ser Lys Ile Pro Pro His Gln Ser Asp Glu Asn Ser Arg Val Thr Ala

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370						375						380			
Leu	Gln	Pro	Val	Asp	Gly	Val	Pro	Pro	Asp	Ser	Ala	Ser	Glu	Ala	Asn
385					390					395					400
Ser	Pro	Glu	Glu	Leu	Ser	Ser	Pro	Glu	Thr	Phe	His	Pro	Gly	Leu	Ser
				405					410					415	
Ser	Gln	Glu	Gln	Cys	Thr	Ala	Pro	Lys	Leu	Met	Glu	Glu	Thr	Ser	Val
			420					425					430		
Phe	Glu	Cys	Pro	Gly	Thr	Pro	Glu	Ala	Ala	Ile	Thr	Ser	Leu	Thr	Ser
		435					440					445			
Gly	Ile	Ser	Ser	Asp	Tyr	Ser	Leu	Glu	Glu	Ile	Asp	Glu	Lys	Glu	Glu
	450					455					460				
Leu	Ser	Glu	Val	Pro	Lys	Val	Glu	Ala	Glu	Asn	Ile	Ser	Pro	Lys	Ser
465					470					475					480
Gln	Asp	Ile	Pro	Phe	Val	Ser	Thr	Asp	Ile	Asn	Thr	Leu	Lys	Asn	
				485					490					495	
Asp	Pro	Asp	Ser	Ala	Leu	Gly	Asn	Gly	Ser	Gly	Glu	Phe	Ser	Gln	Asn
			500					505					510		
Ser	Met	Glu	Glu	Lys	Gln	Glu	Thr	Lys	Ser	Thr	Asp	Gly	Gln	Glu	Pro
		515					520					525			
His	Ser	Val	Val	Tyr	Asp	Thr	Ser	Asn	Gly	Lys	Lys	Val	Val	Asp	Ser
	530					535					540				
Ile	Arg	Asn	Leu	Lys	Ser	Leu	Gly	Pro	Asn	Gln	Glu	Asn	Val	Gln	Asn
545					550					555					560
Glu	Ile	Ile	Val	Tyr	Pro	Glu	Asn	Thr	Glu	Asp	Asn	Met	Lys	Asn	Gly
				565					570					575	
Val	Lys	Lys	Thr	Glu	Ile	Asn	Val	Glu	Gly	Val	Ala	Lys	Asn	Asn	Asn
			580					585					590		
Ile	Asp	Met	Glu	Val	Glu	Arg	Pro	Ser	Asn	Ser	Glu	Ala	His	Glu	Thr
		595					600					605			
Asp	Thr	Ala	Ile	Ser	Tyr	Lys	Glu	Asn	His	Leu	Ala	Ala	Ser	Ser	Val
	610					615					620				
Pro	Asp	Gln	Lys	Leu	Asn	Gln	Pro	Ser	Ala	Glu	Lys	Thr	Lys	Asp	Ala
625					630					635					640
Ala	Ile	Gln	Thr	Thr	Pro	Ser	Cys	Asn	Ser	Phe	Asp	Gly	Lys	His	Gln
				645					650					655	
Asp	His	Asn	Leu	Ser	Asp	Ser	Lys	Val	Glu	Glu	Cys	Val	Gln	Thr	Ser
			660					665					670		
Asn	Asn	Asn	Ile	Ser	Thr	Gln	His	Ser	Cys	Leu	Ser	Ser	Gln	Asp	Ser
		675					680						685		
Val	Asn	Thr	Ser	Arg	Glu	Phe	Arg	Ser	Gln	Gly	Thr	Leu	Ile	Ile	His
	690					695					700				
Ser	Glu	Asp	Pro	Leu	Thr	Val	Lys	Asp	Pro	Ile	Cys	Ala	His	Gly	Asn
705					710					715					720
Asp	Asp	Leu	Leu	Pro	Pro	Val	Asp	Arg	Ile	Asp	Lys	Asn	Ser	Thr	Ala
				725					730					735	
Ser	Tyr	Leu	Lys	Asn	Tyr	Pro	Leu	Tyr	Arg	Gln	Asp	Tyr	Asn	Pro	Lys
			740					745					750		
Pro	Lys	Pro	Ser	Asn	Glu	Ile	Thr	Arg	Glu	Tyr	Ile	Pro	Lys	Ile	Gly
		755					760					765			
Met	Thr	Thr	Tyr	Lys	Ile	Val	Pro	Pro	Lys	Ser	Leu	Glu	Ile	Ser	Lys
	770					775					780				
Asp	Trp	Gln	Ser	Glu	Thr	Ile	Glu	Tyr	Lys	Asp	Asp	Gln	Asp	Met	His
785					790					795					800
Ala	Leu	Gly	Lys	Lys	His	Thr	His	Glu	Asn	Val	Lys	Glu	Thr	Ala	Ile

					805					810					815		
Gln	Thr	Glu	Asp	Ser	Ala	Ile	Ser	Glu	Ser	Pro	Glu	Glu	Pro	Leu	Pro		
			820					825					830				
Asn	Leu	Lys	Pro	Lys	Pro	Asn	Leu	Arg	Thr	Glu	His	Gln	Val	Pro	Ser		
		835					840					845					
Ser	Val	Ser	Ser	Pro	Asp	Asp	Ala	Met	Val	Ser	Pro	Leu	Lys	Pro	Ala		
		850				855					860						
Pro	Lys	Met	Thr	Arg	Asp	Thr	Gly	Thr	Ala	Pro	Phe	Ala	Pro	Asn	Leu		
865					870					875					880		
Glu	Glu	Ile	Asn	Asn	Ile	Leu	Glu	Ser	Lys	Phe	Lys	Ser	Arg	Ala	Ser		
				885					890					895			
Asn	Ala	Gln	Ala	Lys	Pro	Ser	Ser	Phe	Phe	Leu	Gln	Met	Gln	Lys	Arg		
			900					905				910					
Val	Ser	Gly	His	Tyr	Val	Thr	Ser	Ala	Ala	Ala	Lys	Ser	Val	His	Ala		
		915					920					925					
Ala	Pro	Asn	Pro	Ala	Pro	Lys	Glu	Leu	Thr	Asn	Lys	Glu	Ala	Glu	Arg		
		930				935					940						
Asp	Met	Leu	Pro	Ser	Pro	Glu	Gln	Thr	Leu	Ser	Pro	Leu	Ser	Lys	Met		
945					950					955				960			
Pro	His	Ser	Val	Pro	Gln	Pro	Leu	Val	Glu	Lys	Thr	Asp	Asp	Asp	Val		
				965					970					975			
Ile	Gly	Gln	Ala	Pro	Ala	Glu	Ala	Ser	Pro	Pro	Pro	Ile	Ala	Pro	Lys		
			980					985				990					
Pro	Val	Thr	Ile	Pro	Ala	Ser	Gln	Val	Ser	Thr	Gln	Asn	Leu	Lys	Thr		
		995					1000					1005					
Leu	Lys	Thr	Phe	Gly	Ala	Pro	Arg	Pro	Tyr	Ser	Ser	Ser	Gly	Pro	Ser		
		1010				1015					1020						
Pro	Phe	Ala	Leu	Ala	Val	Val	Lys	Arg	Ser	Gln	Ser	Phe	Ser	Lys	Glu		
1025					1030					1035					1040		
Arg	Thr	Glu	Ser	Pro	Ser	Ala	Ser	Ala	Leu	Val	Gln	Pro	Pro	Ala	Asn		
				1045				1050						1055			
Thr	Glu	Glu	Gly	Lys	Thr	His	Ser	Val	Asn	Lys	Phe	Val	Asp	Ile	Pro		
			1060					1065				1070					
Gln	Leu	Gly	Val	Ser	Asp	Lys	Glu	Asn	Asn	Ser	Ala	His	Asn	Glu	Gln		
		1075					1080					1085					
Asn	Ser	Gln	Ile	Pro	Thr	Pro	Thr	Asp	Gly	Pro	Ser	Phe	Thr	Val	Met		
		1090				1095					1100						
Arg	Gln	Ser	Ser	Leu	Thr	Phe	Gln	Ser	Ser	Asp	Pro	Glu	Gln	Met	Arg		
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Gln																	

<210> 2931

<211> 625

<212> DNA

<213> Homo sapiens

<400> 2931

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60

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 120
 ttagagatct tcgaagccat attttctcca gatgttttgg gatgaggaga cacaacaaca
 180
 gtgttttttag gttcactctg atgagttgcc atgaaatcaa accaatctaa actgtcatct
 240
 ctgttattttt tgtgctgagc tgaatgtttc ctacttggtg atctattagg ctccagatgc
 300
 ggtgggggat ctagaactgg gcttccctcg gggctgcctc caggagagaa gatatgtgtg
 360
 agccaggcca aaggagcaaa gtggacattg ggttgcttcc atcaccagga gagacagggtg
 420
 ttccatggag ggcagacaat gtggaaagta acaagaaaaa aaggctagca ctagattctg
 480
 aagcagcagt ctctgctgat aaaccagact cagtactgac tcatcatgtc cccaggaacc
 540
 tgcagaagct gtgcaaagag agggcccaga agttgtgcag aaatagcacc aggggtgcctg
 600
 cacagtgcac agtcccttca cgcgt
 625

<210> 2932

<211> 90

<212> PRT

<213> Homo sapiens

<400> 2932

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Ser	Pro	Gly	Glu	Thr	Gly	Val	Pro	Trp	Arg	Ala	Asp	Asn	Val	Glu	Ser
		20						25					30		
Asn	Lys	Lys	Lys	Arg	Leu	Ala	Leu	Asp	Ser	Glu	Ala	Ala	Val	Ser	Ala
		35					40					45			
Asp	Lys	Pro	Asp	Ser	Val	Leu	Thr	His	His	Val	Pro	Arg	Asn	Leu	Gln
	50					55					60				
Lys	Leu	Cys	Lys	Glu	Arg	Ala	Gln	Lys	Leu	Cys	Arg	Asn	Ser	Thr	Arg
65					70					75				80	
Val	Pro	Ala	Gln	Cys	Thr	Val	Pro	Ser	Arg						
			85						90						

<210> 2933

<211> 688

<212> DNA

<213> Homo sapiens

<400> 2933

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 120
 cgagaaaagtc aagaaacgac tagagaactt ctgaaagtta aagacagatt aattgaagta
 180
 gaaagaaata atgctacact gcaagcagag aagcaagcgt tgaaaactca actgaagcaa
 240

cttgagacac agaacaataa tttgcaggct cagattcttg cacttcagag gcagacagtg
 300
 tcattacaag aacagaatac cactcttcaa acacagaatg ccaagcttca ggttgaaaat
 360
 tccaccctta attcccaaag tacctcactc atgaaccaga atgcccact cctaatecag
 420
 cagtcttcct tagaaaatga aaatgaatct gtaatcaaag agcgagaaga cctaaaatct
 480
 ctctatgatt ctctgatcaa agatcatgaa aagctggaac ttcttcatga acgtcaggct
 540
 tcagagtatg aatctcttat ctctaaacat ggaactctga agtctgccc aaaaaatctt
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 660
 ttggaagatt tggaaaaaat gctcaaag
 688

<210> 2934

<211> 229

<212> PRT

<213> Homo sapiens

<400> 2934

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Lys	Gln	Arg	Gln	Asp	Glu	Glu	Arg	Met	Val	Gln	Ser	Ser	Pro	Pro	Ile
			20					25					30		
Ser	Gly	Glu	Asp	Asn	Lys	Trp	Glu	Arg	Glu	Ser	Gln	Glu	Thr	Thr	Arg
		35					40					45			
Glu	Leu	Leu	Lys	Val	Lys	Asp	Arg	Leu	Ile	Glu	Val	Glu	Arg	Asn	Asn
	50					55					60				
Ala	Thr	Leu	Gln	Ala	Glu	Lys	Gln	Ala	Leu	Lys	Thr	Gln	Leu	Lys	Gln
65					70					75				80	
Leu	Glu	Thr	Gln	Asn	Asn	Leu	Gln	Ala	Gln	Ile	Leu	Ala	Leu	Gln	
				85				90					95		
Arg	Gln	Thr	Val	Ser	Leu	Gln	Glu	Gln	Asn	Thr	Thr	Leu	Gln	Thr	Gln
			100				105						110		
Asn	Ala	Lys	Leu	Gln	Val	Glu	Asn	Ser	Thr	Leu	Asn	Ser	Gln	Ser	Thr
		115				120					125				
Ser	Leu	Met	Asn	Gln	Asn	Ala	Gln	Leu	Leu	Ile	Gln	Gln	Ser	Ser	Leu
	130					135					140				
Glu	Asn	Glu	Asn	Glu	Ser	Val	Ile	Lys	Glu	Arg	Glu	Asp	Leu	Lys	Ser
145					150					155				160	
Leu	Tyr	Asp	Ser	Leu	Ile	Lys	Asp	His	Glu	Lys	Leu	Glu	Leu	Leu	His
				165				170					175		
Glu	Arg	Gln	Ala	Ser	Glu	Tyr	Glu	Ser	Leu	Ile	Ser	Lys	His	Gly	Thr
			180				185					190			
Leu	Lys	Ser	Ala	His	Lys	Asn	Leu	Glu	Val	Glu	His	Arg	Asp	Leu	Glu
		195				200						205			
Asp	Arg	Tyr	Asn	Gln	Leu	Leu	Lys	Gln	Lys	Gly	Gln	Leu	Glu	Asp	Leu
	210					215					220				
Glu	Lys	Met	Leu	Lys											
225															

<210> 2935
<211> 1200
<212> DNA
<213> Homo sapiens

<400> 2935
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120
aactctaaaa gataaagcaa gaaatgtcaa gtaggttttg cacattgggc tgcttttaggc
180
tgtgccctct gattcttctg gtgtactcat gatactctcc cttgggtgcc tccaggctga
240
cgcagctatt tacgttcaga gtgaaatggg ctgtgtggct gggattggga aaggccttgt
300
taaagctggg agaggtttgg tcatggtgac aggggacctg aaggcccagc tcctcttccc
360
tcttgccaat acagggacaa gttaaagaag aagaagaaa taaaggtaaa gatggaaaag
420
aaatccacgc cctctagggg ctcatcatcc aagtcgtcct caaggcagct aagcgagagc
480
ttcaagagca aagagtttgt gtctagtgat gagagctctt cgggagagaa caagagcaaa
540
aagaagagga ggaggagcga ggactctgaa gaagaagaac tagccagtac tccccccagc
600
tcagaggact cagcgtcagg atccgatgag tagaaacgga ggaaggttct ctttgcgctt
660
gccttctcac acccccggga agtcagcagg gaaacgcaga gaactcctat gaaccaccaa
720
aaggctgtaa atgatgaaac atgcaaagct agccacataa catcaagtgt ctttccttca
780
gcctctctcg gtaaagcatc atctcgaaag ccatttggga tcctttctcc aaatgttctg
840
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960
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1020
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1080
aggaaaaaat caggggatct taaaaaagcc aaggtacagg tggaaaggat gagggagggt
1140
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1200

<210> 2936
<211> 109
<212> PRT
<213> Homo sapiens

<400> 2936
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20	25	30	
Val Lys Val Lys Met Glu Lys Lys Ser Thr Pro Ser Arg Gly Ser Ser			
35	40	45	
Ser Lys Ser Ser Ser Arg Gln Leu Ser Glu Ser Phe Lys Ser Lys Glu			
50	55	60	
Phe Val Ser Ser Asp Glu Ser Ser Ser Gly Glu Asn Lys Ser Lys Lys			
65	70	75	80
Lys Arg Arg Arg Ser Glu Asp Ser Glu Glu Glu Leu Ala Ser Thr			
85	90	95	
Pro Pro Ser Ser Glu Asp Ser Ala Ser Gly Ser Asp Glu			
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<210> 2937

<211> 749

<212> DNA

<213> Homo sapiens

<400> 2937

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120
ctctcaaatt ttgtcttctg tcaatacaca ttctgggacc agtgtgagtc tacgggtggct
180
gccccgggtgg tggaccccca ggtgccttca ccacagtcca aggatgcccc gtacacagtg
240
accttctccc actgtaagga ctatgtggtg aatgtaacag aagaatttct ggagttcatt
300
tcagatggag cactggccat tgaagtatgg ggccaccggt gtgctggaaa tggcagctcc
360
atctgggagg tcgattctct tcatgctaag acaagaacac tgcattgacag gtggaatgaa
420
gtaacgcgaa gaatagaaat gtggatctcc atattagaat tgaatgagtt aggagagtat
480
gctgcagtgg aacttcatca ggcaaaagat gtcaacacag gaggcattct tcaacttaga
540
cagggtcatt cccgtagagt acaagtcacg gtgaaacctg tgcagcattc agggacactg
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660
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720
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749

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<210> 2938

<211> 249

<212> PRT

<213> Homo sapiens

<400> 2938

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		20						25					30		
Glu	Ala	Thr	Gly	Leu	Pro	Leu	Asn	Leu	Ser	Asn	Phe	Val	Phe	Cys	Gln
		35						40					45		
Tyr	Thr	Phe	Trp	Asp	Gln	Cys	Glu	Ser	Thr	Val	Ala	Ala	Pro	Val	Val
		50				55					60				
Asp	Pro	Glu	Val	Pro	Ser	Pro	Gln	Ser	Lys	Asp	Ala	Gln	Tyr	Thr	Val
65					70					75				80	
Thr	Phe	Ser	His	Cys	Lys	Asp	Tyr	Val	Val	Asn	Val	Thr	Glu	Glu	Phe
			85					90					95		
Leu	Glu	Phe	Ile	Ser	Asp	Gly	Ala	Leu	Ala	Ile	Glu	Val	Trp	Gly	His
		100						105				110			
Arg	Cys	Ala	Gly	Asn	Gly	Ser	Ser	Ile	Trp	Glu	Val	Asp	Ser	Leu	His
		115					120					125			
Ala	Lys	Thr	Arg	Thr	Leu	His	Asp	Arg	Trp	Asn	Glu	Val	Thr	Arg	Arg
		130				135					140				
Ile	Glu	Met	Trp	Ile	Ser	Ile	Leu	Glu	Leu	Asn	Glu	Leu	Gly	Glu	Tyr
145					150					155				160	
Ala	Ala	Val	Glu	Leu	His	Gln	Ala	Lys	Asp	Val	Asn	Thr	Gly	Gly	Ile
			165					170					175		
Phe	Gln	Leu	Arg	Gln	Gly	His	Ser	Arg	Arg	Val	Gln	Val	Thr	Val	Lys
		180						185				190			
Pro	Val	Gln	His	Ser	Gly	Thr	Leu	Pro	Leu	Met	Val	Glu	Ala	Ile	Leu
		195					200					205			
Ser	Val	Ser	Ile	Gly	Cys	Val	Thr	Ala	Arg	Ser	Thr	Lys	Leu	Gln	Arg
		210				215					220				
Gly	Leu	Asp	Ser	Tyr	Gln	Arg	Asp	Asp	Glu	Asp	Gly	Asp	Asp	Met	Asp
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Ser	Tyr	Gln	Glu	Glu	Asp	Leu	Asn	Cys							
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<210> 2939

<211> 2405

<212> DNA

<213> Homo sapiens

<400> 2939

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gagtgcatt gcagatccag accccagagt cagaaggagt gagaaccctg acccctaatt
120

ccactgcatt cagccaatag gagcccagcc accatggcgg agctgcagga ggtgcagatt
180

acagaggaga agccactgtt gccaggacag acgcctgagg cggccaagac tcaactctgtg
240

gagacacatt acggctctgt cactttcact gtctatggca cccccaaacc caaacgcca
300

gcgattccta cctaccacga tgtgggactc aactataaat cttgcttcca gccactgttt
360

cagttcgagg acatgcagga aatcattcag aactttgtgc gggttcatgt ggatgccct
420

ggaatggaag agggagcccc tgtgttcct ttgggatatt agtaccattc tctggaccag
480

cttgcagaca tgatcccttg cgtcctgcag tacctaaatt tctctacaat aattggagtt
540
ggtggtggag ctggagccta catcctggcg agatatgctc ttaaccaccc ggacactggt
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720
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1260
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1380
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1560
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1620
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1680
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<210> 2940

<211> 357

<212> PRT

<213> Homo sapiens

<400> 2940

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Tyr	Gly	Ser	Val	Thr	Phe	Thr	Val	Tyr	Gly	Thr	Pro	Lys	Pro	Lys	Arg
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Pro	Ala	Ile	Leu	Thr	Tyr	His	Asp	Val	Gly	Leu	Asn	Tyr	Lys	Ser	Cys
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Phe	Gln	Pro	Leu	Phe	Gln	Phe	Glu	Asp	Met	Gln	Glu	Ile	Ile	Gln	Asn
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Phe	Val	Arg	Val	His	Val	Asp	Ala	Pro	Gly	Met	Glu	Glu	Gly	Ala	Pro
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Val	Phe	Pro	Leu	Gly	Tyr	Gln	Tyr	Pro	Ser	Leu	Asp	Gln	Leu	Ala	Asp
			100					105					110		
Met	Ile	Pro	Cys	Val	Leu	Gln	Tyr	Leu	Asn	Phe	Ser	Thr	Ile	Ile	Gly
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Val	Gly	Val	Gly	Ala	Gly	Ala	Tyr	Ile	Leu	Ala	Arg	Tyr	Ala	Leu	Asn
	130					135					140				
His	Pro	Asp	Thr	Val	Glu	Gly	Leu	Val	Leu	Ile	Asn	Ile	Asp	Pro	Asn
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Ala	Lys	Gly	Trp	Met	Asp	Trp	Ala	Ala	His	Lys	Leu	Thr	Gly	Leu	Thr
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Ser	Ser	Ile	Pro	Glu	Met	Ile	Leu	Gly	His	Leu	Phe	Ser	Gln	Glu	Glu
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Leu	Ser	Gly	Asn	Ser	Glu	Leu	Ile	Gln	Lys	Tyr	Arg	Asn	Ile	Ile	Thr
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Cys	Pro	Val	Met	Leu	Val	Val	Gly	Asp	Gln	Ala	Pro	His	Glu	Asp	Ala
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Val	Val	Glu	Cys	Asn	Ser	Lys	Leu	Asp	Pro	Thr	Gln	Thr	Ser	Phe	Leu
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<400> 2942

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 His Leu Phe Lys Gln Gly Gln Leu Ser Ala Gln Gly Gly Ala Gln Pro
 50 55 60
 Ser Val Glu Ala Pro Ala Ala Pro Arg Pro Thr Ala Thr Gln Leu Thr
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 Arg Asp Leu Leu Arg Ser Arg Gly Ile Ala Gly Leu Tyr Lys Gly Leu
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 Gly Ala Thr Leu Leu Arg Asp Val Pro Phe Ser Val Val Tyr Phe Pro
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 115 120 125
 Ser Pro Phe Tyr Val Ser Phe Leu Ala Gly Cys Val Ala Gly Ser Ala
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 Cys Ala Arg Lys Ile Leu Arg His Glu Gly Pro Ser Ala Phe Leu Lys
 180 185 190
 Gly Ala Tyr Cys Arg Ala Leu Val Ile Ala Pro Leu Phe Gly Ile Ala
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<212> DNA

<213> Homo sapiens

<400> 2943

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<211> 218

<212> PRT

<213> Homo sapiens

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			20					25					30		
Lys	Lys	Ile	Ser	Arg	Leu	Asp	Ala	Glu	Leu	Val	Lys	Tyr	Lys	Asp	Gln
		35					40					45			
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	50					55				60					
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<211> 463

<212> PRT

<213> Homo sapiens

<400> 2946

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		20					25					30			
Lys	Arg	Thr	Thr	Pro	Leu	Gln	Thr	His	Ser	Ile	Ile	Ile	Ser	Asp	Gln
		35				40						45			
Val	Pro	Ser	Asp	Gln	Asp	Ala	His	Gln	Tyr	Leu	Arg	Leu	Arg	Asp	Gln
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Ser	Glu	Ala	Thr	Gln	Val	Met	Ala	Glu	Pro	Gly	Glu	Gly	Gly	Ser	Glu
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Thr	Val	Ala	Leu	Pro	Pro	Pro	Pro	Ser	Glu	Glu	Gly	Gly	Val	Pro	
			85				90						95		
Gln	Asp	Ala	Ala	Gly	Arg	Gly	Gly	Thr	Pro	Gln	Ile	Arg	Val	Val	Gly
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Gly	Arg	Gly	His	Val	Ala	Ile	Lys	Ala	Gly	Gln	Glu	Glu	Gly	Gln	Pro
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Pro	Ala	Glu	Gly	Leu	Ala	Ala	Ser	Val	Val	Met	Ala	Ala	Asp	Arg	
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Ser	Leu	Lys	Lys	Gly	Val	Gln	Gly	Gly	Glu	Lys	Ala	Leu	Glu	Ile	Cys

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Ala	Glu	Glu	Val	Lys	Thr	Gly	Lys	Cys	Ala	Thr	Val	Ser	Ala	Ala	Val
			180					185					190		
Ala	Glu	Arg	Glu	Ser	Ala	Glu	Val	Val	Val	Lys	Glu	Gly	Leu	Ala	Glu
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Lys	Glu	Val	Met	Glu	Glu	Gln	Met	Glu	Val	Glu	Glu	Gln	Pro	Pro	Glu
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Gly	Glu	Glu	Ile	Glu	Val	Ala	Glu	Glu	Asp	Arg	Leu	Glu	Glu	Glu	Ala
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Pro	Leu	Glu	Ala	Ile	Gln	Leu	Glu	Leu	Asp	Thr	Val	Asn	Ala	Gln	Ala
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Asp	Arg	Ala	Phe	Gln	Gln	Leu	Glu	His	Lys	Phe	Gly	Arg	Met	Arg	Arg
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Trp	Met	Thr	Ala	Phe	Arg	Asn	His	Pro	Gln	Leu	Ser	Ala	Met	Ile	Arg
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Arg	Ser	Ser	Gly	Arg	Val	Val	Ser	Leu	Ser	Thr	Pro	Ile	Ile	Trp	Arg
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Arg	Gly	His	Glu	Pro	Gln	Ser	Phe	Ile	Arg	Arg	Asn	Gln	Asp	Leu	Ile
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Cys	Ser	Phe	Phe	Thr	Trp	Phe	Ser	Asp	His	Ser	Leu	Pro	Glu	Ser	Asp
				405					410					415	
Lys	Ile	Ala	Glu	Ile	Ile	Lys	Glu	Asp	Leu	Trp	Pro	Asn	Pro	Leu	Gln
			420					425					430		
Tyr	Tyr	Leu	Leu	Arg	Glu	Gly	Val	Arg	Arg	Ala	Arg	Arg	Arg	Pro	Leu
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<211> 997

<212> DNA

<213> Homo sapiens

<400> 2947

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240

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<211> 332

<212> PRT

<213> Homo sapiens

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			20					25					30		
Ser	Asp	Ile	Arg	Ala	Gly	Thr	Ala	Pro	Ser	Cys	Arg	Asn	His	Ile	Lys
	35					40					45				
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<212> DNA
<213> Homo sapiens
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 85 90 95
 Pro Lys Tyr Leu Ile Val Val Arg Pro Ala Pro Pro Pro Ser Gln Lys
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 Ala Tyr Val Pro Arg Lys Leu Ile Pro Ile Thr Ile Ile Lys Gln Val
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 <211> 3478
 <212> DNA
 <213> Homo sapiens

<400> 2951

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<211> 493

<212> PRT

<213> Homo sapiens

<400> 2952

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Glu	Ser	Gln	Asp	Lys	Cys	Thr	Tyr	Thr	Phe	Ile	Val	Pro	Gln	Gln	Arg	50	55	60	
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Arg	Ile	Leu	Asn	Gln	Thr	Ala	Asp	Met	Leu	Gln	Leu	Ala	Ser	Lys	Tyr	165	170	175	
Lys	Asp	Leu	Glu	His	Lys	Phe	Gln	His	Leu	Ala	Met	Leu	Ala	His	Asn	180	185	190	
Gln	Ser	Glu	Ile	Ile	Ala	Gln	Leu	Glu	Glu	His	Cys	Gln	Arg	Val	Pro	195	200	205	
Ser	Ala	Arg	Pro	Val	Pro	Gln	Pro	Pro	Pro	Ala	Ala	Pro	Pro	Arg	Val	210	215	220	
Tyr	Gln	Pro	Pro	Thr	Tyr	Asn	Arg	Ile	Ile	Asn	Gln	Ile	Ser	Thr	Asn	225	230	235	240
Glu	Ile	Gln	Ser	Asp	Gln	Asn	Leu	Lys	Val	Leu	Pro	Pro	Pro	Leu	Pro	245	250	255	
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Gly	Pro	Trp	Arg	Asp	Cys	Leu	Gln	Ala	Leu	Glu	Asp	Gly	His	Asp	Thr	275	280	285	
Ser	Ser	Ile	Tyr	Leu	Val	Lys	Pro	Glu	Asn	Thr	Asn	Arg	Leu	Met	Gln	290	295	300	
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His	Gly	Asn	Ala	Gly	Asp	Ser	Phe	Thr	Trp	His	Asn	Gly	Lys	Gln	Phe
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Thr	Thr	Leu	Asp	Arg	Asp	His	Asp	Val	Tyr	Thr	Gly	Asn	Cys	Ala	His
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Tyr	Gln	Lys	Gly	Gly	Trp	Trp	Tyr	Asn	Ala	Cys	Ala	His	Ser	Asn	Leu
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<210> 2953

<211> 1377

<212> DNA

<213> Homo sapiens

<400> 2953

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<210> 2954

<211> 181

<212> PRT

<213> Homo sapiens

<400> 2954

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Val	Trp	Leu	Thr	Tyr	Trp	Val	Val	Tyr	Ala	Leu	Phe	Gly	Leu	Ala	Glu
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Phe	Phe	Ser	Asp	Leu	Leu	Leu	Ser	Trp	Phe	Pro	Phe	Tyr	Tyr	Val	Gly
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Lys	Cys	Ala	Phe	Leu	Leu	Phe	Cys	Met	Ala	Pro	Arg	Pro	Trp	Asn	Gly
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His	Gly	Ala	Val	Asp	Arg	Ile	Met	Asn	Asp	Leu	Ser	Gly	Arg	Ala	Leu
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Asp	Ala	Ala	Ala	Gly	Ile	Thr	Arg	Asn	Val	Lys	Pro	Ser	Gln	Thr	Pro
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Gln	Pro	Lys	Asp	Lys											
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 <211> 295
 <212> DNA
 <213> Homo sapiens

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<210> 2956
 <211> 91
 <212> PRT
 <213> Homo sapiens

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Glu	Val	Lys	Lys	Glu	Arg	Glu	Gly	Leu	Glu	Asn	Asp	Leu	Lys	Ser	Val
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Ser	Ile	Pro	Thr	Pro	Ala	Tyr	Gln	Ser	Leu	Pro	Ala	Gly	Gly	His	Ala	
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<210> 2961

<211> 434

<212> DNA

<213> Homo sapiens

<400> 2961

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 Gln Gln Leu Gln Pro Gln Pro Val Ala Val Gln Gly Pro Glu Pro Ala
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 <213> Homo sapiens

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<213> Homo sapiens

<400> 2964

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		20					25					30			
Gly	Trp	Arg	Gly	Asp	Thr	Cys	Gln	Ser	Gly	Glu	Ala	Gly	Ser	Thr	Leu
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Leu	Met	Val	His	Glu	Trp	Val	Val	Val	Lys	Gly	Ala	Val	Trp	Ala	Gly
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<211> 3739

<212> DNA

<213> Homo sapiens

<400> 2965

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840

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<211> 386

<212> PRT

<213> Homo sapiens

<400> 2966

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Glu	Val	Leu	Glu	Trp	Tyr	Thr	Ala	Lys	Asp	Phe	Ile	Val	Gly	Lys	Ser	
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Leu	Thr	Ile	Leu	Gly	Arg	Thr	Phe	Phe	Ile	Tyr	Asp	Cys	Asp	Pro	Phe	
				85					90					95		
Thr	Arg	Arg	Tyr	Tyr	Lys	Glu	Lys	Phe	Gly	Ile	Thr	Asp	Leu	Pro	Arg	
			100					105					110			
Ile	Asp	Val	Ser	Lys	Arg	Glu	Pro	Pro	Pro	Val	Lys	Gln	Glu	Leu	Pro	
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<211> 1103

<212> DNA

<213> Homo sapiens

<400> 2967

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<212> PRT

<213> Homo sapiens

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<400> 2971

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<212> PRT

<213> Homo sapiens

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Leu Lys Glu Val Ile Arg Glu Asn Asp His Leu Tyr Phe Ile Phe Glu
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Glu Asn Leu Leu Cys Met Gly Pro Glu Leu Val Lys Ile Ala Asp Phe
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Ser Thr Arg Trp Tyr Arg Ala Pro Glu Val Leu Leu Arg Ser Thr Asn
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Val Tyr Thr Leu Arg Pro Leu Phe Pro Gly Ala Ser Glu Ile Asp Thr
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Ile Phe Lys Ile Cys Gln Val Leu Gly Thr Pro Lys Lys Thr Asp Trp
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<210> 2976

<211> 328

<212> PRT

<213> Homo sapiens

<400> 2976

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<211> 1420

<212> DNA

<213> Homo sapiens

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<211> 369

<212> PRT

<213> Homo sapiens

<400> 2978

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Gly Gln Asp Gly Val Ala Glu	Leu Gly Val Arg Pro	Gly Gly Gly Pro
260	265	270
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Ser Leu Gly Pro Glu Asp Glu	Gly Val Tyr His Cys	Ala Pro Ser Ala
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<210> 2979

<211> 2191

<212> DNA

<213> Homo sapiens

<400> 2979

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 Asn Ala Arg Arg Ala Arg Val Gly Arg Ala Glu Cys Leu Leu Ser Gly
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 Arg Pro Pro Thr Ala Val Leu Pro Arg Leu Val Glu Asn Leu Lys Ala
 65 70 75 80
 Arg Val Pro Val Pro Gly His Thr Glu Pro Leu Trp Ser Glu Gly Thr
 85 90 95
 Ala Pro Gly Gln Gly Leu Trp Ser His Ala Pro Ala Asp Gly Ser Leu
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 Met Asn Leu Ile Arg Thr Leu Val Gly Ala Val Val Phe Glu Leu Leu
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<210> 2982

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<212> PRT

<213> Homo sapiens

<400> 2982

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His	Ser	Ser	Ser	Ser	Glu	Glu	Ser	Thr	Lys	Arg	Thr	Ser	His	Ser	Lys
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Leu	Pro	Glu	Gln	Glu	Ala	Ala	Glu	Ala	Asp	Leu	Ser	Asn	Met	Glu	Arg
			50				55				60				
Val	Ser	Leu	Ser	Thr	Ala	Asp	Pro	Gln	Gly	Val	Thr	Tyr	Ala	Glu	Leu
65					70				75					80	
Ser	Thr	Ser	Ala	Leu	Ser	Glu	Ala	Ala	Ser	Asp	Thr	Thr	Gln	Glu	Pro
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<212> DNA

<213> Homo sapiens

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Ser Leu Gln Met Arg Ala Val Ala Glu Gly Phe Leu Leu Val Tyr Ser
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Ile Arg Lys Val His Pro Asp Ser Lys Ala Pro Val Ile Ile Val Gly
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Asn Lys Gly Asp Leu Leu His Ala Arg Gln Val Gln Thr Gln Asp Gly
145 150 155 160
Ile Gln Leu Ala Asn Glu Leu Gly Ser Leu Phe Leu Glu Ile Ser Thr
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 4380
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<210> 2986

<211> 988

<212> PRT

<213> Homo sapiens

<400> 2986

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		20						25					30		
Glu	Leu	Cys	Val	Lys	Leu	Met	Phe	Leu	His	Pro	Val	Asp	Tyr	Gly	Arg
		35					40					45			
Lys	Ala	Glu	Glu	Leu	Leu	Trp	Arg	Lys	Val	Tyr	Tyr	Glu	Val	Ile	Gln
	50					55					60				
Leu	Ile	Lys	Thr	Asn	Lys	Lys	His	Ile	His	Ser	Arg	Ser	Thr	Leu	Glu
65				70					75					80	
Cys	Ala	Tyr	Arg	Thr	His	Leu	Val	Ala	Gly	Ile	Gly	Phe	Tyr	Gln	His
				85					90					95	
Leu	Leu	Leu	Tyr	Ile	Gln	Ser	His	Tyr	Gln	Leu	Glu	Leu	Gln	Cys	Cys
		100						105					110		
Ile	Asp	Trp	Thr	His	Val	Thr	Asp	Pro	Leu	Ile	Gly	Cys	Lys	Lys	Pro

2222

545					550					555				560
Asn	Leu	Leu	Leu	Gln	Pro	Thr	Thr	Asn	Pro	His	Thr	Ser	Ala	Ser His
				565					570					575
Arg	Pro	Cys	Val	Asn	Gly	Asp	Val	Asp	Lys	Pro	Ser	Glu	Pro	Ala Ser
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	610					615					620			
Gly	Leu	Leu	Pro	Ala	Val	Lys	Val	Phe	Leu	Asp	Trp	Leu	Arg	Thr Asn
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Pro	Asp	Leu	Ile	Ile	Val	Cys	Ala	Gln	Ser	Ser	Gln	Ser	Leu	Trp Asn
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Arg	Leu	Ser	Val	Leu	Leu	Asn	Leu	Leu	Pro	Ala	Ala	Gly	Glu	Leu Gln
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Glu	Ser	Gly	Leu	Ala	Leu	Cys	Pro	Glu	Val	Gln	Asp	Leu	Leu	Glu Gly
		675					680					685		
Cys	Glu	Leu	Pro	Asp	Leu	Pro	Ser	Ser	Leu	Leu	Leu	Pro	Glu	Asp Met
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705					710					715				720
Phe	Asp	Thr	Asp	Arg	Pro	Leu	Leu	Ser	Thr	Leu	Glu	Glu	Ser	Val Val
				725					730					735
Arg	Ile	Cys	Cys	Ile	Arg	Ser	Phe	Gly	His	Phe	Ile	Ala	Arg	Leu Gln
			740					745					750	
Gly	Ser	Ile	Leu	Gln	Phe	Asn	Pro	Glu	Val	Gly	Ile	Phe	Val	Ser Ile
		755					760					765		
Ala	Gln	Ser	Glu	Gln	Glu	Ser	Leu	Leu	Gln	Gln	Ala	Gln	Ala	Gln Phe
	770					775					780			
Arg	Met	Ala	Gln	Glu	Glu	Ala	Arg	Arg	Asn	Arg	Leu	Met	Arg	Asp Met
785					790					795				800
Ala	Gln	Leu	Arg	Leu	Gln	Leu	Glu	Val	Ser	Gln	Leu	Glu	Gly	Ser Leu
				805					810					815
Gln	Gln	Pro	Lys	Ala	Gln	Ser	Ala	Met	Ser	Pro	Tyr	Leu	Val	Pro Asp
			820					825					830	
Thr	Gln	Ala	Leu	Cys	His	His	Leu	Pro	Val	Ile	Arg	Gln	Leu	Ala Thr
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Ser	Gly	Arg	Phe	Ile	Val	Ile	Ile	Pro	Arg	Thr	Val	Ile	Asp	Gly Leu
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Asp	Leu	Leu	Lys	Lys	Glu	His	Pro	Gly	Ala	Arg	Asp	Gly	Ile	Arg Tyr
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Leu	Glu	Ala	Glu	Phe	Lys	Lys	Gly	Asn	Arg	Tyr	Ile	Arg	Cys	Gln Lys
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Glu	Val	Gly	Lys	Ser	Phe	Glu	Arg	His	Lys	Leu	Lys	Arg	Gln	Asp Ala
		900						905					910	
Asp	Ala	Trp	Thr	Leu	Tyr	Lys	Ile	Leu	Asp	Ser	Cys	Lys	Gln	Leu Thr
	915						920					925		
Leu	Ala	Gln	Gly	Ala	Gly	Glu	Glu	Asp	Pro	Ser	Gly	Met	Val	Thr Ile
	930					935					940			
Ile	Thr	Gly	Leu	Pro	Leu	Asp	Asn	Pro	Ser	Val	Leu	Ser	Gly	Pro Met
945					950					955				960
Gln	Ala	Ala	Leu	Gln	Ala	Ala	Ala	His	Ala	Ser	Val	Asp	Ile	Lys Asn
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980

985

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 <211> 1016
 <212> DNA
 <213> Homo sapiens

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 120
 gaaaggcggg cctgaaattc acaggggaga gcggatattc caggaggcag tctaagttat
 180
 ctgaggcgtg caactcacc agtgagacca agttactgta gttctccagc atcacgtccc
 240
 agtacaggtc cctctgagcg tcatccagggt cctgccactc ctcccagggtg aagtgcacag
 300
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 360
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 420
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 480
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 720
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 780
 cctcctgctt cagcctccc agttgcaggg actacaggca cccgccacaa tgcccggcta
 840
 ttttttgtgt ttttagtaga gatgggggtt cactatgtta gccaggatgg tcttgatctc
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<210> 2988
 <211> 95
 <212> PRT
 <213> Homo sapiens

<400> 2988
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 Ala Ser Arg Val Ala Gly Thr Thr Gly Thr Arg His Asn Ala Arg Leu

	35					40					45					
Phe	Phe	Val	Phe	Leu	Val	Glu	Met	Gly	Phe	His	Tyr	Val	Ser	Gln	Asp	
	50					55					60					
Gly	Leu	Asp	Leu	Leu	Thr	Ser	Leu	Leu	Ala	Xaa	Leu	Arg	Leu	Pro	Lys	
65					70					75					80	
Cys	Trp	Asn	Tyr	Xaa	Arg	Glu	Thr	Pro	Arg	Leu	Val	Ser	Ile	Lys		
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<211> 1185
<212> DNA
<213> Homo sapiens
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120						
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720						
aaactcccct	ttttaccctt	tgcacagcaa	attgacatca	aatcctgttt	ctactttttt	
780						
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840						
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1080						
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1140						
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1185						

<210> 2990
 <211> 114
 <212> PRT
 <213> Homo sapiens

<400> 2990
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 35 40 45
 Asp Val Met Leu Glu Thr Tyr Ser Ser Leu Val Ser Leu Gly His Cys
 50 55 60
 Ile Thr Lys Pro Glu Met Ile Phe Lys Leu Glu Gln Gly Ala Glu Pro
 65 70 75 80
 Trp Ile Val Glu Glu Thr Leu Asn Leu Arg Leu Ser Gly Gly Ser Lys
 85 90 95
 Lys Gln Val Phe Ser Gly Ile Cys His Arg Ser Leu Val Glu Leu Gln
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 Glu Val

<210> 2991
 <211> 980
 <212> DNA
 <213> Homo sapiens

<400> 2991
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 480
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 720

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 780
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<210> 2992

<211> 64

<212> PRT

<213> Homo sapiens

<400> 2992

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His	Thr	Gly	Pro	Phe	Thr	Glu	Val	Ser	Pro	Gly	Ala	Leu	Gly	Trp	Pro
			20					25					30		
Val	Leu	Cys	Ser	Gly	Leu	Leu	Leu	Gly	Gly	Leu	Gly	Ala	Ala	His	Phe
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<210> 2993

<211> 687

<212> DNA

<213> Homo sapiens

<400> 2993

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 240
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 420
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 480
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tacgatgagg ccgtggacgt gtacgcg
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<210> 2994
<211> 229
<212> PRT
<213> Homo sapiens

<400> 2994
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Ala Val Ala Thr Ser Pro Asp Gly Arg Tyr Leu Lys Phe Asp Ile Glu
35 40 45
Ile Gly Arg Gly Ser Phe Lys Thr Val Tyr Arg Gly Leu Asp Thr Asp
50 55 60
Thr Thr Val Glu Val Ala Trp Cys Glu Leu Gln Thr Arg Lys Leu Ser
65 70 75 80
Arg Ala Glu Arg Gln Arg Phe Ser Glu Glu Val Glu Met Leu Lys Gly
85 90 95
Leu Gln His Pro Asn Ile Val Arg Phe Tyr Asp Ser Trp Lys Ser Val
100 105 110
Leu Arg Gly Gln Val Cys Ile Val Leu Val Thr Glu Leu Met Thr Ser
115 120 125
Gly Thr Leu Lys Thr Tyr Leu Arg Arg Phe Arg Glu Met Lys Pro Arg
130 135 140
Val Leu Gln Arg Trp Ser Arg Gln Ile Leu Arg Gly Leu His Phe Leu
145 150 155 160
His Ser Arg Val Pro Pro Ile Leu His Arg Asp Leu Lys Cys Asp Asn
165 170 175
Val Phe Ile Thr Gly Pro Thr Gly Ser Val Lys Ile Gly Asp Leu Gly
180 185 190
Leu Ala Thr Leu Lys Arg Ala Ser Phe Ala Lys Ser Val Ile Gly Thr
195 200 205
Pro Glu Phe Met Ala Pro Glu Met Tyr Glu Glu Lys Tyr Asp Glu Ala
210 215 220
Val Asp Val Tyr Ala
225

<210> 2995
<211> 1879
<212> DNA
<213> Homo sapiens

<400> 2995
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180
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240

atgtgtcaag aagaccacag ttagcaccag gaaaggaact ttacttttagc ttctgattac
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1740
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1879

<210> 2996
<211> 101
<212> PRT
<213> Homo sapiens

<400> 2996
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Leu Xaa Thr Gln Ala Gly Ile Gln Trp Cys Asp Leu Ser Ser Leu Gln
35 40 45
Pro Pro Pro Pro Arg Phe Lys Arg Phe Ser Cys Leu Ser Leu Leu Ser
50 55 60
Ser Trp Asp Ser Asp Arg Cys Leu Pro Pro His Pro Gly Asp Phe Cys
65 70 75 80
Ile Phe Ser Arg Asp Gly Val Ser Pro Cys Cys Ser Gly Trp Ser Arg
85 90 95
Thr Pro Asp Leu Lys
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<210> 2997
<211> 800
<212> DNA
<213> Homo sapiens

<400> 2997
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acaaccatac ctgcttcttc tgagataaca agaattgaga tggagtcaac atccaccctg
180
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800

<210> 2998

<211> 266

<212> PRT

<213> Homo sapiens

<400> 2998

Thr	Gln	Met	Gly	Thr	Ile	Ser	Ala	Arg	Gln	Glu	Phe	Tyr	Ser	Ser	Tyr
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Pro	Gly	Leu	Pro	Glu	Pro	Ser	Lys	Val	Thr	Ser	Pro	Val	Val	Thr	Ser
		20						25					30		
Ser	Thr	Ile	Lys	Asp	Ile	Val	Ser	Thr	Thr	Ile	Pro	Ala	Ser	Ser	Glu
		35					40					45			
Ile	Thr	Arg	Ile	Glu	Met	Glu	Ser	Thr	Ser	Thr	Leu	Thr	Pro	Thr	Pro
	50					55					60				
Arg	Glu	Thr	Ser	Thr	Ser	Gln	Glu	Ile	His	Ser	Ala	Thr	Lys	Pro	Ser
65					70					75				80	
Thr	Val	Pro	Tyr	Lys	Ala	Leu	Thr	Ser	Ala	Thr	Ile	Glu	Asp	Ser	Met
				85					90					95	
Thr	Gln	Val	Met	Ser	Ser	Ser	Arg	Gly	Pro	Ser	Pro	Asp	Gln	Ser	Thr
		100						105					110		
Met	Ser	Gln	Asp	Ile	Ser	Thr	Glu	Val	Ile	Thr	Arg	Leu	Ser	Thr	Ser
	115						120					125			
Pro	Ile	Lys	Thr	Glu	Ser	Thr	Glu	Met	Thr	Ile	Thr	Thr	Gln	Thr	Gly
	130					135						140			
Ser	Pro	Gly	Ala	Thr	Ser	Arg	Gly	Thr	Leu	Thr	Leu	Asp	Thr	Ser	Thr
145					150					155				160	
Thr	Phe	Met	Ser	Gly	Thr	His	Ser	Thr	Ala	Ser	Gln	Arg	Phe	Ser	His
				165					170					175	
Ser	Gln	Met	Thr	Ala	Leu	Met	Ser	Arg	Thr	Pro	Gly	Asp	Val	Pro	Trp
		180						185					190		
Leu	Thr	His	Pro	Ser	Gly	Glu	Glu	Pro	Ala	Ser	Ala	Ser	Phe	Ser	Leu
	195					200						205			
Ala	Ser	Pro	Val	Leu	Thr	Ser	Phe	Phe	Ser	Phe	Phe	Ala	His	Ser	Gln
	210					215					220				
Lys	Pro	Pro	Pro	Phe	Leu	Val	Pro	Gly	Gln	Thr	Phe	Ser	Leu	Gly	Leu
225					230					235				240	
Gly	Lys	Pro	Lys	Met	Trp	Gly	Gln	Pro	Arg	Thr	Glu	Thr	Phe	Pro	Pro
				245					250					255	
Met	Asp	Asn	Leu	Phe	Glu	Lys	Gly	Pro	Phe						
			260					265							

<210> 2999

<211> 550

<212> DNA

<213> Homo sapiens

<400> 2999

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60

acccccttgc cactttggcc ccctccagge tttgggcact gacaagcatg ggaaggagggc
 120
 tgaggggtgc actgaggaca gcccagtget ggccctgcagg cacccttaa catgaacagc
 180
 ctgggtcacca tgaacagcag caggaggcag acaggctcct ggggtggaaag aagctgggtcc
 240
 acagtgaaga cccacctcca agccagggaa agcctgaagc ctgggggatg ggctgccagt
 300
 ccagaaaacc gcaagggcaa cttgtggtgc tttccctgg gccaccat gccgcccat
 360
 ggacgaattg gcatgcactt tctccctct gaggccata aaagccctg ggctcagcca
 420
 gagctgagcg gatatcagga cgacaagctg cacagaggta ctaccatac caaggcctcc
 480
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 540
 cagggtctcc
 550

<210> 3000
 <211> 167
 <212> PRT
 <213> Homo sapiens

<400> 3000
 Met Cys Ser Ser Gln Gln Arg Gly Gly Leu Gly Met Gly Ser Thr Ser
 1 5 10 15
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 20 25 30
 Ala Phe Met Gly Leu Arg Gly Glu Lys Val His Ala Asn Ser Ser Met
 35 40 45
 Gly Gly His Gly Trp Ala Gln Gly Lys Ala Pro Gln Val Ala Leu Ala
 50 55 60
 Val Ser Gly Thr Gly Asp Pro Ser Pro Arg Leu Gln Ala Phe Pro Gly
 65 70 75 80
 Leu Glu Val Gly Leu His Cys Gly Pro Ala Ser Phe His Pro Gly Ala
 85 90 95
 Cys Leu Pro Pro Ala Ala Val His Gly Asp Gln Ala Val His Val Lys
 100 105 110
 Gly Cys Leu Gln Ala Ser Thr Gly Leu Ser Ser Val His Pro Ser Ala
 115 120 125
 Ser Phe Pro Cys Leu Ser Val Pro Lys Ala Trp Arg Gly Pro Lys Trp
 130 135 140
 Gln Gly Gly Trp His Val Ser Thr Thr Pro Ser Met Cys Thr Leu Ser
 145 150 155 160
 Trp Ala Val Thr Ala Pro Gly
 165

<210> 3001
 <211> 1092
 <212> DNA
 <213> Homo sapiens

<400> 3001

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 aatagctctg cctggctgag tttgaaaggt cactgttctg tttcagcggt gagatgcctt
 120
 gaagtacaga gggtgagccc ctatgtatgc ctgggggagt cccagaaaagt ggaatcccaa
 180
 ccttgctcag ctcaccagtg tttcttctat aaccagaca ttgcaaagac agcagtaccc
 240
 actgaggcat ccagcccagc tcaggccctg ccaccnca gtaccaaagc atcattgtca
 300
 ggcaagggat acagaacaca gtgctctcac cagactgcag cttgggggac acccagcacg
 360
 gagagaagct gaggcggaac tgcactatct accggccctg gttctcccc tacagctact
 420
 tcgtgtgtgc agacaaagag agccagctgg aggcctatga cttcccagag gtgcagcagg
 480
 atgagggcaa gtgggacaac tgcctttctg aggacatggc tgagaacatc tgttcgtcct
 540
 cttcctcccc agagaacact tgccctcgag aagccaccaa gaaatccagg catggcctgg
 600
 actccatcac atcccaggac atcctaattg cttccagggtg gcaccagca cagcagaatg
 660
 gctacaagtg cgtggcctgc tgccgcatgt accccaccct ggacttcctc aagagccaca
 720
 tcaagagggg cttcaggagg ggcttcagct gcaagggtga ctaccgcaag ctcaaagccc
 780
 tctggagcaa ggagcagaag gcccggctgg gagacaggct ctctccggc agctgccagg
 840
 ccttcaatag tctgtctgaa caccttaggc aaattggcgg tgaagcctac ttatgtctct
 900
 agagagatgc caataaagtt agtcacagcc ttctgtccag tctgaggtca ccccgcacag
 960
 cctgtgtcc tccccagaac ccggtctca tcaccttgg ctaatggttg cctagcaaca
 1020
 ccaggcacac accctccctt ttctctcttt taaaaataaa gacaatactt gaagtttggg
 1080
 aaaatcaaaa aa
 1092

<210> 3002

<211> 115

<212> PRT

<213> Homo sapiens

<400> 3002

Met	Ala	Pro	Phe	Arg	Ile	Pro	Gln	Asp	Val	Ile	His	Asn	Ser	Ser	Ala
1				5					10					15	
Trp	Leu	Ser	Leu	Lys	Gly	His	Cys	Ser	Val	Ser	Ala	Leu	Arg	Cys	Leu
			20					25					30		
Glu	Val	Gln	Arg	Leu	Ser	Pro	Tyr	Val	Cys	Leu	Gly	Glu	Ser	Gln	Lys
		35					40					45			
Val	Glu	Ser	Gln	Pro	Cys	Ser	Ala	His	Gln	Cys	Phe	Phe	Tyr	Asn	Pro
	50					55					60				
Asp	Ile	Ala	Lys	Thr	Ala	Val	Pro	Thr	Glu	Ala	Ser	Ser	Pro	Ala	Gln

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65              70              75              80
Ala Leu Pro Pro Xaa Ser Thr Lys Ala Ser Leu Ser Gly Lys Gly Tyr
              85              90              95
Arg Thr Gln Cys Ser His Gln Thr Ala Ala Trp Gly Thr Pro Ser Thr
              100              105              110
Glu Arg Ser
              115

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<210> 3003

<211> 474

<212> DNA

<213> Homo sapiens

<400> 3003

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tatggaagct ctgcggtcat acaaccagga gcactcccag agcttcacgt ttgatgatgc
120
ccaacaggag gaccggaaga gactggcgga gctgctggtc tccgtcctgg aacagggctt
180
gccaccctcc caccgtgtca tctggctgca gagtgtccga atcctgtccc gggaccgcaa
240
ctgcctggac ccgttcacca gccgccagag cctgcaggca ctagcctgct atgctgacat
300
ctctgtctct gaggggtccg tcccagagtc cgcagacatg gatgttgtag tggagtcctt
360
caagtgcctg tgcaacctcg tgctcagcag ccctgtggca cagatgctgg cagcagaggg
420
ccgcctagtg gtgaagctca cagagcgtgt ggggctgtac cgtgagagga gctc
474

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<210> 3004

<211> 155

<212> PRT

<213> Homo sapiens

<400> 3004

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Met Glu Pro Arg Ala Val Ala Glu Ala Val Glu Thr Gly Glu Glu Asp
1              5              10              15
Val Ile Met Glu Ala Leu Arg Ser Tyr Asn Gln Glu His Ser Gln Ser
20              25              30
Phe Thr Phe Asp Asp Ala Gln Gln Glu Asp Arg Lys Arg Leu Ala Glu
35              40              45
Leu Leu Val Ser Val Leu Glu Gln Gly Leu Pro Pro Ser His Arg Val
50              55              60
Ile Trp Leu Gln Ser Val Arg Ile Leu Ser Arg Asp Arg Asn Cys Leu
65              70              75              80
Asp Pro Phe Thr Ser Arg Gln Ser Leu Gln Ala Leu Ala Cys Tyr Ala
85              90              95
Asp Ile Ser Val Ser Glu Gly Ser Val Pro Glu Ser Ala Asp Met Asp
100              105              110
Val Val Leu Glu Ser Leu Lys Cys Leu Cys Asn Leu Val Leu Ser Ser
115              120              125
Pro Val Ala Gln Met Leu Ala Ala Glu Ala Arg Leu Val Val Lys Leu

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130 135 140
 Thr Glu Arg Val Gly Leu Tyr Arg Glu Arg Ser
 145 150 155

<210> 3005
 <211> 799
 <212> DNA
 <213> Homo sapiens

<400> 3005
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 gacaacagtg acaactggga actcaagttc aatctggacc agtacgtcaa caagcggtag
 120
 ccaggcctcg tgaagattgt ccgcaacagc cggcggggaag gactgatccg cgcgcggctg
 180
 cagggctgga aggcggccac cgccccagtc gtcggcttct ttgatgcccc cgtcagagttc
 240
 aacacgggct gggccgagcc cgcactgtcg cggatccgag aggaccggcg tcgcatcgctg
 300
 ctgccagcca tcgacaacat caagtacagc acgtttgagg tgcagcagta tgcgaacgcc
 360
 gcccatggct acaactgggg cctctggtgc atgtacatca tcccccgca ggactggctg
 420
 gaccgcggcg acgagtcagc acccatcagg accccagcca tgatcggtcg ctcttcgta
 480
 gtggaccgcg agtacttcgg agacattggg ctgctggacc ccggcatgga ggtgtatggc
 540
 ggcgagaacg tagaactggg catgaggggtg tggcagtgtg gcggcagcat ggaggtgctg
 600
 ccctgctccc gcgtggccca catcgagcgc accaggaagc cctacaacaa cgacattgac
 660
 tactacgcca agcgcaacgc cctgcgccacc gccgaggtgt ggatggatga cttcaagtcc
 720
 cagtggtaca tggcctggaa catccccatg tcgaaccagc ggggtggactt cggggacgtg
 780
 tctgagaggc tggccctgc
 799

<210> 3006
 <211> 266
 <212> PRT
 <213> Homo sapiens

<400> 3006
 Val His Ser Val Val Asn His Thr Pro Ser Gln Leu Leu Lys Glu Val
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 Ile Leu Val Asp Asp Asn Ser Asp Asn Val Glu Leu Lys Phe Asn Leu
 20 25 30
 Asp Gln Tyr Val Asn Lys Arg Tyr Pro Gly Leu Val Lys Ile Val Arg
 35 40 45
 Asn Ser Arg Arg Glu Gly Leu Ile Arg Ala Arg Leu Gln Gly Trp Lys
 50 55 60
 Ala Ala Thr Ala Pro Val Val Gly Phe Phe Asp Ala His Val Glu Phe

65		70		75		80									
Asn	Thr	Gly	Trp	Ala	Glu	Pro	Ala	Leu	Ser	Arg	Ile	Arg	Glu	Asp	Arg
				85					90					95	
Arg	Arg	Ile	Val	Leu	Pro	Ala	Ile	Asp	Asn	Ile	Lys	Tyr	Ser	Thr	Phe
			100					105					110		
Glu	Val	Gln	Gln	Tyr	Ala	Asn	Ala	Ala	His	Gly	Tyr	Asn	Trp	Gly	Leu
		115					120					125			
Trp	Cys	Met	Tyr	Ile	Ile	Pro	Pro	Gln	Asp	Trp	Leu	Asp	Arg	Gly	Asp
	130					135				140					
Glu	Ser	Ala	Pro	Ile	Arg	Thr	Pro	Ala	Met	Ile	Gly	Cys	Ser	Phe	Val
145					150				155					160	
Val	Asp	Arg	Glu	Tyr	Phe	Gly	Asp	Ile	Gly	Leu	Leu	Asp	Pro	Gly	Met
			165				170					175			
Glu	Val	Tyr	Gly	Gly	Glu	Asn	Val	Glu	Leu	Gly	Met	Arg	Val	Trp	Gln
		180					185					190			
Cys	Gly	Gly	Ser	Met	Glu	Val	Leu	Pro	Cys	Ser	Arg	Val	Ala	His	Ile
	195						200				205				
Glu	Arg	Thr	Arg	Lys	Pro	Tyr	Asn	Asn	Asp	Ile	Asp	Tyr	Tyr	Ala	Lys
	210				215				220						
Arg	Asn	Ala	Leu	Arg	Thr	Ala	Glu	Val	Trp	Met	Asp	Asp	Phe	Lys	Ser
225					230				235					240	
His	Val	Tyr	Met	Ala	Trp	Asn	Ile	Pro	Met	Ser	Asn	Pro	Gly	Val	Asp
			245				250					255			
Phe	Gly	Asp	Val	Ser	Glu	Arg	Leu	Ala	Leu						
		260					265								

<210> 3007

<211> 536

<212> DNA

<213> Homo sapiens

<400> 3007

cttaagagag gttgcaatgt gaatgataga gatggattga cagatatgac tctttttacat
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tatacctgca aatctggagc tcatggtatt ggtgatgtgg aaacagctgt aaaatttgca
120

actcagctta ttgacctggg agcagacatt agtttgcgga gtcgctggac aaacatgaat
180

gctttgcatt atgctgctta ttttgatgtc cctgaactta taagagtgat tttgaaaaca
240

tcgaaaccaa aagatgtgga tgccccttgc agtgatttta attttggaac agctttgcat
300

attgcagcat acaacttggtg tgcaggtgct gtgaagtgcc tcttggagca gggagcaaat
360

cctgcattta ggaatgacaa aggacagatc cctgctgatg ttgttccaga cccagtagat
420

atgccgtag agatggctga cgccgcagcc actgctaagg aaatcaagca gatgcttcta
480

gatgcggtgc ctctgtcatg taacatctca aaggccatgc tcccccttc acgcgt
536

<210> 3008

<211> 163

<212> PRT

<213> Homo sapiens

<400> 3008

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Met Thr Leu Leu His Tyr Thr Cys Lys Ser Gly Ala His Gly Ile Gly
 1           5           10           15
Asp Val Glu Thr Ala Val Lys Phe Ala Thr Gln Leu Ile Asp Leu Gly
          20          25          30
Ala Asp Ile Ser Leu Arg Ser Arg Trp Thr Asn Met Asn Ala Leu His
          35          40          45
Tyr Ala Ala Tyr Phe Asp Val Pro Glu Leu Ile Arg Val Ile Leu Lys
          50          55          60
Thr Ser Lys Pro Lys Asp Val Asp Ala Pro Cys Ser Asp Phe Asn Phe
65          70          75          80
Gly Thr Ala Leu His Ile Ala Ala Tyr Asn Leu Cys Ala Gly Ala Val
          85          90          95
Lys Cys Leu Leu Glu Gln Gly Ala Asn Pro Ala Phe Arg Asn Asp Lys
          100          105          110
Gly Gln Ile Pro Ala Asp Val Val Pro Asp Pro Val Asp Met Pro Leu
          115          120          125
Glu Met Ala Asp Ala Ala Ala Thr Ala Lys Glu Ile Lys Gln Met Leu
          130          135          140
Leu Asp Ala Val Pro Leu Ser Cys Asn Ile Ser Lys Ala Met Leu Pro
145          150          155          160
Pro Ser Arg

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<210> 3009

<211> 1335

<212> DNA

<213> Homo sapiens

<400> 3009

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nnacgcgtca gtctggaaag ggcacttata agagctacca gctgccctgt tggcttcgct
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ggtcggatcg tctctctggc cccgccaaac aggcgggggg agcggcccg actgtggggc
120
catggcagta gtctcctcgt tctccgccgc cgctagccta gctgagtcgc cggcttctgc
180
gctaggggct cccaccgcct ccgcaggcta aggagccgct gccaccaacg agctgtgagg
240
gttactatgc tccctctttg ccgccgtctc ctctcttgc ccgcgcaggc acccctctgg
300
ctgctcagtc ctgcctcagt gtcaaaccag aagagaagta aaattcaaca aaaatttatg
360
tgtggagttc cttcttaaaa gaagaaaaaa gtgattattt agactatgga tcggagcaaa
420
cggaattcaa ttgcaggatt tctccacgt gtggagcgtc ttgaagagtt tgaaggaggt
480
ggtggaggag aaggaaatgt gagccagggt ggaagagttt ggccatcttc gtatcgagct
540
cttataagtg ctttttccag actgacgcgt ttggatgatt tcacctgtaa aaaaataggg
600
tctggcttct tttctgaagt gttcaaggta cgacaccgag cttctggtca ggtgatggct
660

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cttaagatga acacattgag cagtaaccgg gcaaacaatgc tgaaagaagt acagctcatg
 720
 aatagactct cccatcccaa catccttagg ttcattgggtg tatgtgttca tcaaggacaa
 780
 ttgcatgcac ttacagagta tatcaactcc gggaacctgg aacagttgct agacagtaac
 840
 ctgcatttgc cttggactgt gagggtaaaa ctggcctatg acatagcagt gggcctcagc
 900
 taccttcaact tcaaaggcat ttttcatcgg gacctcacat ctaagaactg cctgataaag
 960
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 1020
 gatgtcagca tggggagtgga gaagctggcc gtggtgggtt cccattctg gatggcacct
 1080
 gaggttctcc gagatgagcc ctataatgaa aaggcagatg tggtctctta tggatcatc
 1140
 ctctgcgaga tcctcgtccg catccaggcc gatccggact atcttccccg cacagagaat
 1200
 ttccggctgg actatgatgc tttccagcac atggtgggag actgtcccc agattttctg
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 1335

<210> 3010

<211> 310

<212> PRT

<213> Homo sapiens

<400> 3010

Met	Asp	Arg	Ser	Lys	Arg	Asn	Ser	Ile	Ala	Gly	Phe	Pro	Pro	Arg	Val
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Glu	Arg	Leu	Glu	Phe	Glu	Gly	Gly	Gly	Gly	Gly	Glu	Gly	Asn	Val	
		20				25						30			
Ser	Gln	Val	Gly	Arg	Val	Trp	Pro	Ser	Ser	Tyr	Arg	Ala	Leu	Ile	Ser
		35				40					45				
Ala	Phe	Ser	Arg	Leu	Thr	Arg	Leu	Asp	Asp	Phe	Thr	Cys	Lys	Lys	Ile
	50					55				60					
Gly	Ser	Gly	Phe	Phe	Ser	Glu	Val	Phe	Lys	Val	Arg	His	Arg	Ala	Ser
65					70				75					80	
Gly	Gln	Val	Met	Ala	Leu	Lys	Met	Asn	Thr	Leu	Ser	Ser	Asn	Arg	Ala
			85					90					95		
Asn	Met	Leu	Lys	Glu	Val	Gln	Leu	Met	Asn	Arg	Leu	Ser	His	Pro	Asn
		100						105					110		
Ile	Leu	Arg	Phe	Met	Gly	Val	Cys	Val	His	Gln	Gly	Gln	Leu	His	Ala
		115				120					125				
Leu	Thr	Glu	Tyr	Ile	Asn	Ser	Gly	Asn	Leu	Glu	Gln	Leu	Leu	Asp	Ser
	130					135					140				
Asn	Leu	His	Leu	Pro	Trp	Thr	Val	Arg	Val	Lys	Leu	Ala	Tyr	Asp	Ile
145				150						155				160	
Ala	Val	Gly	Leu	Ser	Tyr	Leu	His	Phe	Lys	Gly	Ile	Phe	His	Arg	Asp
			165					170					175		
Leu	Thr	Ser	Lys	Asn	Cys	Leu	Ile	Lys	Arg	Asp	Glu	Asn	Gly	Tyr	Ser

180							185						190			
Ala	Val	Val	Ala	Asp	Phe	Gly	Leu	Ala	Glu	Lys	Ile	Pro	Asp	Val	Ser	
195							200						205			
Met	Gly	Ser	Glu	Lys	Leu	Ala	Val	Val	Gly	Ser	Pro	Phe	Trp	Met	Ala	
210							215						220			
Pro	Glu	Val	Leu	Arg	Asp	Glu	Pro	Tyr	Asn	Glu	Lys	Ala	Asp	Val	Phe	
225							230						235			
Ser	Tyr	Gly	Ile	Ile	Leu	Cys	Glu	Ile	Ile	Val	Arg	Ile	Gln	Ala	Asp	
245							250						255			
Pro	Asp	Tyr	Leu	Pro	Arg	Thr	Glu	Asn	Phe	Gly	Leu	Asp	Tyr	Asp	Ala	
260							265						270			
Phe	Gln	His	Met	Val	Gly	Asp	Cys	Pro	Pro	Asp	Phe	Leu	Gln	Leu	Thr	
275							280						285			
Phe	Asn	Cys	Cys	Asn	Val	Ser	Val	Phe	Leu	Pro	Leu	Pro	Phe	Ile	Arg	
290							295						300			
Gly	Trp	Leu	Asn	Pro	Phe											
305							310									

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<210> 3011
<211> 3253
<212> DNA
<213> Homo sapiens
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<400> 3011
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120
gacaccatga accacctgaa cgtgctggcc aaagcgctct atgacaatgt ggccgagtc
180
ccgatgagc tctccttcgc caagggtgac atcatgacgg tgctggagca ggacacgcag
240
ggcctggacg gctgggtggct ctgctcgctg catgggcgcc agggcatcgt gcctgggaac
300
cgctcaaga tcttggtggg catgtatgat aagaagccag cagggcctgg ctccggccct
360
ccgcgccccc cggcccagcc tcagcctggc ctccatgcc cagcgctcc ggctcccag
420
tacacgccc tgctcccaa cacctaccag cccagccag acagcgtcta cctgggtgcc
480
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540
tctccccag ccaagcagac atccaccttc tcgaagcaga cccccatca ccggtttccc
600
agcccgcca cagacctgta ccaggtgcc ccagggcctg gaggcctgc ccaggatatt
660
taccaggtgc caccttctgc cgggatgggg catgacatct accaggtccc ccggtccatg
720
gacacacgca gctgggaggg cacgaagccc ccggcaaagg tggtgggtgcc caccgcgtg
780
gggcagggct atgtatacga ggccgccag ccggagcagg acgagtacga catcccgcga
840
cacctgctgg ccccggggcc acaggacatc tatgatgtgc ccccggttcg ggggctgctt
900

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cccagccagt atggccagga ggtgtatgac acacccccca tggctgtcaa gggccccaat
960
ggccgagacc cgttgctgga ggtgtatgac gtgccccca gtgtggagaa gggcctgcc
1020
ccgtccaacc accacgcagt ctacgacgtt cctccatcgg tgagcaagga tgtgcccgat
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1140
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1200
gaggacgtgt attacgtgcc gccccggct cctgacctct acgacgtgcc ccctggcttg
1260
cggcggcctg gcccgggcac cctgtacgat gtgccccgtg aacgggtgct tcctcctgag
1320
gtggctgatg gtggcgtggt cgacagtggg gtgtatgcgg tgcctcccc agctgaacgt
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<212> PRT

<213> Homo sapiens

<400> 3012

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 Gln Gly Leu Thr Pro Thr Pro Gly Ala Leu Pro Asn Tyr Leu Lys Val
 50 55 60
 Lys Ala Asn Arg Ala Ile Pro Gln Ala Val Thr Ser Thr Arg Leu Gly
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 Thr Thr Lys Pro Pro Cys Thr Ile Thr Pro Pro Cys Arg Ala Val Arg
 85 90 95
 Ser Thr Ser Pro Arg Leu Pro Thr
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<210> 3019
 <211> 882
 <212> DNA
 <213> Homo sapiens

<400> 3019
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 120
 gcgctgtgtc cgtcgccatg acagatcaga cctattgtga ccgcctgggtg caggacacgc
 180
 ctttctgac aggccatggg cgcttgagtg agcagcaggt ggacaggatc atcctccagc
 240
 tgaaccgtta ctaccacag atccttacca acaaggaggc ggaaaagggtg ctgaggagtt
 300
 ccggaacccc aaggcatcct tgcgtgtgag gctctgtgac ctctgagcc acctgcagcg
 360
 gagctgtgag cgggactgcc aggagttcta ccgagccctg tatatccatg cccagccctt
 420

gcacagccgc ctgcccagcc gccacgctct gcagaactca gattgcacag agctagactc
480
gggcagccag agcggcgagc tgagtaacag gggacccatg agcttcctgg ctggcctggg
540
ccttgctgtg ggactggccc tgctcctgta ctgctatccg ccagacccca agggcctgcc
600
agggacccgg cgcgctcctg gtttctcgcc tgtcatcatc gacagacatg tcagccgcta
660
cctgctggcc ttcttggcag atgacctagg ggggctctga cagaccctgg acccagggcc
720
tcacctgcca ctcaaccaa gagtcctcga gccggcccgcc caaggggact gctgcttctt
780
tttctaaatg catatcttctc attatttata atttggtgtaa aaaacacacc ttcaccttac
840
aaggtgctga ccatattaaa tgttcagggt ctctcaaaaa aa
882

<210> 3020

<211> 58

<212> PRT

<213> Homo sapiens

<400> 3020

Gln	Gly	Thr	His	Glu	Leu	Pro	Gly	Trp	Pro	Gly	Pro	Cys	Cys	Gly	Thr
1				5				10						15	
Gly	Pro	Ala	Pro	Val	Leu	Leu	Ser	Ala	Arg	Pro	Gln	Gly	Pro	Ala	Arg
			20					25					30		
Asp	Pro	Ala	Arg	Pro	Arg	Phe	Leu	Ala	Cys	His	His	Arg	Gln	Thr	Cys
		35					40					45			
Gln	Pro	Leu	Pro	Ala	Gly	Leu	Pro	Gly	Arg						
	50					55									

<210> 3021

<211> 1008

<212> DNA

<213> Homo sapiens

<400> 3021

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120
gggcatgtgg gtgccttggg gtagggtaaa gggtccatct tgatcgcggt ggtgtttccc
180
aagtgtatac actcaccaaa actatactta gaactcaaaa ctgcgcaaat atatacttaa
240
aatggatgca gttgggttatg tataaattat acctcaataa agttgattaa aaacatcaat
300
tcctcagaaa attcttttct gaccactccc ctctcagacg aggtcggggc tcctgggtatg
360
cataccata ccactacaa cctgtattta ttttttttga aacatggtct ctttctgtcg
420
tccaggctgg agtgacgtgg cgcaatcatg gatcactgca gccttgacct tcctggctca
480

agtgatcctc ccggtcacc ccagtagct ggaaccacag gcgcgcttcc acaccgaaa
 540
 gcccattttc tagaggcgga aaccgaagcg ccagtgga aaggcgaccc gccggggtg
 600
 cggggtgctc aacgcgctgc cacctggggc ccaacgcgtt gacctcgcg ttaggttgc
 660
 tccgcggact acggttctgg ctgctagct ctggaaggga gcaccgggag ggaatggtg
 720
 caactcccaa ggaggggacc cagggatccg agaaaggaag acttggggta ggtggggtg
 780
 gattttgact ggagagaaga aagggtcagg agtgcagggc ggtacctgg ggagctgcgt
 840
 ggactcgcgc agacgggaag caggcgctg ctggcggtga cctggggccg gagaggaacg
 900
 ctgggtcccc tccttgggag ttgccacat tccctcccg tgctcccttc cagagctagc
 960
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 1008

<210> 3022

<211> 94

<212> PRT

<213> Homo sapiens

<400> 3022

Met	His	Thr	His	Thr	His	Tyr	Asn	Leu	Tyr	Leu	Phe	Phe	Leu	Lys	His
1				5					10					15	
Gly	Leu	Phe	Leu	Ser	Ser	Arg	Leu	Glu	Cys	Ser	Gly	Ala	Ile	Met	Asp
			20					25					30		
His	Cys	Ser	Leu	Asp	Leu	Pro	Gly	Ser	Ser	Asp	Pro	Pro	Gly	Ser	Pro
		35					40				45				
Pro	Val	Ala	Gly	Thr	Thr	Gly	Ala	Leu	Pro	His	Arg	Lys	Ala	His	Phe
	50					55					60				
Leu	Glu	Ala	Glu	Thr	Glu	Ala	Pro	Ser	Gly	Lys	Gly	Asp	Pro	Pro	Gly
65					70					75				80	
Met	Arg	Gly	Ala	Gln	Arg	Ala	Ala	Thr	Trp	Gly	Pro	Thr	Arg		
				85					90						

<210> 3023

<211> 1834

<212> DNA

<213> Homo sapiens

<400> 3023

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 120
 tcagattttt cctccagtt ggtttaattt ctatttccta aaacattaaa ataataatgg
 180
 aatgattgaa ataataaaca tttttcttat tcaagatttc gtcattggcta ttgtaaagga
 240
 aaccctagga aaatggtgaa aacttgggca gaaaaagaaa tgagggaactt aatcaggcta
 300

aacacagcag agataccatg tccagaacca ataatgctaa gaagtcattg tcttgcattg
360
agtttcatcg gtaaagatga catgcctgca ccactcttga aaaatgtcca gttatcagaa
420
tccaaggctc gggagttgta cctgcaggtc attcagtaca tgagaagaat gtatcaggat
480
gccagacttg tccatgcaga tctcagtga tttaacatgc tgtaccacgg tggaggcgtg
540
tatatcattg acgtgtctca gtccgtggag caccaccacc cacatgcctt ggagttcttg
600
agaaaggatt gcgccaacgt caatgatttc tttatgaggc acagtgttgc tgtcatgact
660
gtgcgggagc tctttgaatt tgtcacagat ccatccatta cacatgagaa catggatgct
720
tatctctcaa aggccatgga aatagcatct caaaggacca aggaagaacg gtctagccaa
780
gatcatgtgg atgaagaggt gtttaagcga gcatatatct ctagaacctt gaatgaagtg
840
aaaaattatg agagggatat ggacataatt atgaaattga aggaagagga catggccatg
900
aatgcccac aagataatat tctaccagac tgttacagga ttgaagaaag atttgtcagg
960
agttcagaag gtccctgcac tctagaaaat caagtggagg aaaggacttg ttctgattca
1020
gaagatattg gaagctctga gtgctctgac acagactctg aagagcaggg agaccatgcc
1080
cgccccaaaga aacacaccac ggaccctgac attgataaaa aagaaagaaa aaagatggtc
1140
aaggaagccc agagagagaa aagaaaaaac aaaattccta aacatgtgaa aaaaagaaag
1200
gagaagacag ccaagacgaa aaaaggcaaa tagaatgaga accatattat gtacagtcatt
1260
tttctcagtc tctttttctc gcctgaactc ttaagctgca tctggaagat ggcttattgg
1320
ttttaaccag attgtcatcg tggcactgct tgtgaagacg gattcaaattg ttttcatgta
1380
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1440
gacagaggat ttatttaagc tattatttta ataaagaact ttgtacattt ttatttttat
1500
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1680
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1740
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1834

<210> 3024

<211> 347

<212> PRT

<213> Homo sapiens

<400> 3024

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Asn Asn Lys His Phe Ser Tyr Ser Arg Phe Arg His Gly Tyr Cys Lys
 1           5           10           15
Gly Asn Pro Arg Lys Met Val Lys Thr Trp Ala Glu Lys Glu Met Arg
      20           25           30
Asn Leu Ile Arg Leu Asn Thr Ala Glu Ile Pro Cys Pro Glu Pro Ile
      35           40           45
Met Leu Arg Ser His Val Leu Val Met Ser Phe Ile Gly Lys Asp Asp
      50           55           60
Met Pro Ala Pro Leu Leu Lys Asn Val Gln Leu Ser Glu Ser Lys Ala
      65           70           75           80
Arg Glu Leu Tyr Leu Gln Val Ile Gln Tyr Met Arg Arg Met Tyr Gln
      85           90           95
Asp Ala Arg Leu Val His Ala Asp Leu Ser Glu Phe Asn Met Leu Tyr
      100          105          110
His Gly Gly Gly Val Tyr Ile Ile Asp Val Ser Gln Ser Val Glu His
      115          120          125
Asp His Pro His Ala Leu Glu Phe Leu Arg Lys Asp Cys Ala Asn Val
      130          135          140
Asn Asp Phe Phe Met Arg His Ser Val Ala Val Met Thr Val Arg Glu
      145          150          155          160
Leu Phe Glu Phe Val Thr Asp Pro Ser Ile Thr His Glu Asn Met Asp
      165          170          175
Ala Tyr Leu Ser Lys Ala Met Glu Ile Ala Ser Gln Arg Thr Lys Glu
      180          185          190
Glu Arg Ser Ser Gln Asp His Val Asp Glu Glu Val Phe Lys Arg Ala
      195          200          205
Tyr Ile Pro Arg Thr Leu Asn Glu Val Lys Asn Tyr Glu Arg Asp Met
      210          215          220
Asp Ile Ile Met Lys Leu Lys Glu Glu Asp Met Ala Met Asn Ala Gln
      225          230          235          240
Gln Asp Asn Ile Leu Pro Asp Cys Tyr Arg Ile Glu Glu Arg Phe Val
      245          250          255
Arg Ser Ser Glu Gly Pro Cys Thr Leu Glu Asn Gln Val Glu Glu Arg
      260          265          270
Thr Cys Ser Asp Ser Glu Asp Ile Gly Ser Ser Glu Cys Ser Asp Thr
      275          280          285
Asp Ser Glu Glu Gln Gly Asp His Ala Arg Pro Lys Lys His Thr Thr
      290          295          300
Asp Pro Asp Ile Asp Lys Lys Glu Arg Lys Lys Met Val Lys Glu Ala
      305          310          315          320
Gln Arg Glu Lys Arg Lys Asn Lys Ile Pro Lys His Val Lys Lys Arg
      325          330          335
Lys Glu Lys Thr Ala Lys Thr Lys Lys Gly Lys
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<210> 3025

<211> 1370

<212> DNA

<213> Homo sapiens

<400> 3025

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120
agctttctgaa gcatctaggt gatcttctta aatctttgac aggaaagagt aggaaacttt
180
ttggcagact tttacctggt gaatggactt gttttagaat caaggaaaag aagagaacat
240
ctcagtgaag aggatattct tcgaaataag gccatcatgg agagtttgag taaaggtgga
300
aacataatgg aacagaattt tgagccgatt cgaagacagt ctcttacacc tcctcctcag
360
aacactatta catgggaaga atatatatct gctgaaaatg gaaaagctcc tcatctgggt
420
agagaattgg tgtgcaaaga gagtaagaaa acgttttaaag ctacgatagc catgagccag
480
gaatttcctt tagggataga gttattattg aatgttttag aagtagtagc tcccttcaag
540
cactttaaca agcttagaga atttgttcag atgaagcttc ctccaggctt tcctgtaaaa
600
ttagatatac ctgtgtttcc cacaatcaca gccactgtga cttttcagga gtttcgatac
660
gatgaatttg atggctccat ctttactata cctgatgact acaaggaaga cccaagccgt
720
tttctgatac ttttaactgac gtggaaaagg atgccgtcta accaaggaaa gaaaatacag
780
agaccctaga agtggatcca aatagaaggg acaaagctt tcagtgaaga aaaggggaatt
840
acacattgaa tcgacacatc agtaatacga tacagtgaag tgggcctcta ataagaattt
900
cagcgagttt tctgatgtgc ctttttttgt ctttttataa atatacatat tataaatgta
960
atagtttgac acattaatga ccctaagacc tgcgtatgtg aagcagctat gagtgcgtg
1020
atttggtttt aaaaattttt acacttcttg ttgaaatata tatgcatata aatatatcta
1080
tatctatata tatatctaaa acactcctgg accattaacg taaattaaat gtcttaagag
1140
atatggagcc ctttttaaact tgatcatctt atgcaagggt acatttataa atattccttc
1200
gagctttggt ttcataaaat gtaaaactatg taacattatg tatagttcag taatttgaat
1260
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1370

<210> 3026

<211> 152

<212> PRT

<213> Homo sapiens

<400> 3026

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Pro Ile Arg Arg Gln Ser Leu Thr Pro Pro Gln Asn Thr Ile Thr
 20           25           30
Trp Glu Glu Tyr Ile Ser Ala Glu Asn Gly Lys Ala Pro His Leu Gly
 35           40           45
Arg Glu Leu Val Cys Lys Glu Ser Lys Lys Thr Phe Lys Ala Thr Ile
 50           55           60
Ala Met Ser Gln Glu Phe Pro Leu Gly Ile Glu Leu Leu Leu Asn Val
 65           70           75           80
Leu Glu Val Val Ala Pro Phe Lys His Phe Asn Lys Leu Arg Glu Phe
 85           90           95
Val Gln Met Lys Leu Pro Pro Gly Phe Pro Val Lys Leu Asp Ile Pro
 100          105          110
Val Phe Pro Thr Ile Thr Ala Thr Val Thr Phe Gln Glu Phe Arg Tyr
 115          120          125
Asp Glu Phe Asp Gly Ser Ile Phe Thr Ile Pro Asp Asp Tyr Lys Glu
 130          135          140
Asp Pro Ser Arg Phe Pro Asp Leu
145          150

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<210> 3027

<211> 1154

<212> DNA

<213> Homo sapiens

<400> 3027

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120
cgcagacggc ggcctccgcg gcgctctcca gtcattggact accggcgggt tctcatgagc
180
cgggtggtcc cggggcaatt cgacgacgcg gactcctctg acagtgaaaa cagagacttg
240
aagacagtca aagagaagga tgacattctg tttgaagacc ttcaagacaa tgtgaatgag
300
aatggtgaag gtgaaataga agatgaggag gaggagggtt atgatgatga tgatgatgac
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420
aaccacagg caaatcgaca gacctccgac agcagttcag ccaaaatgtc tactccagca
480
gacaaggtct tacggaaatt tgagaataaa attaatttag ataagctaaa tgttactgat
540
tccgtcataa ataaagtcac cgaaaagtct agacaaaagg aagcagatat gtatcgcatc
600
aaagataagg cagacagagc aactgtagaa cagggtgttg atcccagaac aagaatgatt
660
ttattcaaga tgttgactag aggaatcata acagagataa atggctgcat tagcacagga
720
aaagaagcta atgtatacca tgctagcaca gcaaaggag agagcagagc aatcaaaatt
780

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tataaaactt ctattttggt gttcaaagat cgggataaat atgtaagtgg agaattcaga
 840
 tttcgtcatg gctattgtaa aggaaaccct aggaaaatgg tgaaaacttg ggcagaaaaa
 900
 gaaatgagga acttaatcag gctaaacaca gcagagatac catgtccaga accaataatg
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 1154

<210> 3028

<211> 331

<212> PRT

<213> Homo sapiens

<400> 3028

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Asp	Asp	Ala	Asp	Ser	Ser	Asp	Ser	Glu	Asn	Arg	Asp	Leu	Lys	Thr	Val
		20						25					30		
Lys	Glu	Lys	Asp	Asp	Ile	Leu	Phe	Glu	Asp	Leu	Gln	Asp	Asn	Val	Asn
		35					40						45		
Glu	Asn	Gly	Glu	Gly	Glu	Ile	Glu	Asp	Glu	Glu	Glu	Glu	Gly	Tyr	Asp
	50					55					60				
Asp	Asp	Asp	Asp	Asp	Trp	Asp	Trp	Asp	Glu	Gly	Val	Gly	Lys	Leu	Ala
65					70					75					80
Lys	Gly	Tyr	Val	Trp	Asn	Gly	Gly	Ser	Asn	Pro	Gln	Ala	Asn	Arg	Gln
				85					90					95	
Thr	Ser	Asp	Ser	Ser	Ser	Ala	Lys	Met	Ser	Thr	Pro	Ala	Asp	Lys	Val
				100				105					110		
Leu	Arg	Lys	Phe	Glu	Asn	Lys	Ile	Asn	Leu	Asp	Lys	Leu	Asn	Val	Thr
		115					120					125			
Asp	Ser	Val	Ile	Asn	Lys	Val	Thr	Glu	Lys	Ser	Arg	Gln	Lys	Glu	Ala
		130				135					140				
Asp	Met	Tyr	Arg	Ile	Lys	Asp	Lys	Ala	Asp	Arg	Ala	Thr	Val	Glu	Gln
145					150					155					160
Val	Leu	Asp	Pro	Arg	Thr	Arg	Met	Ile	Leu	Phe	Lys	Met	Leu	Thr	Arg
				165					170					175	
Gly	Ile	Ile	Thr	Glu	Ile	Asn	Gly	Cys	Ile	Ser	Thr	Gly	Lys	Glu	Ala
			180					185					190		
Asn	Val	Tyr	His	Ala	Ser	Thr	Ala	Asn	Gly	Glu	Ser	Arg	Ala	Ile	Lys
		195					200					205			
Ile	Tyr	Lys	Thr	Ser	Ile	Leu	Val	Phe	Lys	Asp	Arg	Asp	Lys	Tyr	Val
		210				215					220				
Ser	Gly	Glu	Phe	Arg	Phe	Arg	His	Gly	Tyr	Cys	Lys	Gly	Asn	Pro	Arg
225					230					235					240
Lys	Met	Val	Lys	Thr	Trp	Ala	Glu	Lys	Glu	Met	Arg	Asn	Leu	Ile	Arg
				245					250					255	
Leu	Asn	Thr	Ala	Glu	Ile	Pro	Cys	Pro	Glu	Pro	Ile	Met	Leu	Arg	Ser

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                260                265                270
His Val Leu Val Met Ser Phe Ile Gly Lys Asp Asp Ile Ser Phe His
      275                280                285
Ser Arg Pro Ala Pro Leu Leu Lys Asn Val Gln Leu Ser Glu Ser Lys
      290                295                300
Ala Arg Glu Leu Tyr Leu Gln Val Ile Gln Tyr Met Arg Arg Met Tyr
305                310                315                320
Gln Asp Ala Arg Leu Val His Ala Asp Arg Arg
              325                330

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<210> 3029

<211> 344

<212> DNA

<213> Homo sapiens

<400> 3029

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120
acatttcccg aggaactaga tatgagtact tttattgatg ttgaagatga aaaatctcct
180
cagactgaaa gttgcactga caggggagca gaaaatgaag gtagttgtca cagtgatcag
240
atgagcaacg atttctccaa tgatgatggg gttgatgaag gaatctgttt tgaaaccaat
300
agtggaactg aaaagatctc aaaatctgga cctgaaaaga attc
344

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<210> 3030

<211> 114

<212> PRT

<213> Homo sapiens

<400> 3030

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Thr Arg Asp Ala Arg Lys Gly Leu Arg Phe Leu His Phe Pro Tyr Leu
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Leu Thr Leu Gln Leu Lys Arg Phe Asp Phe Asp Tyr Thr Thr Met His
      20                25                30
Arg Ile Lys Leu Asn Asp Arg Met Thr Phe Pro Glu Glu Leu Asp Met
      35                40                45
Ser Thr Phe Ile Asp Val Glu Asp Glu Lys Ser Pro Gln Thr Glu Ser
      50                55                60
Cys Thr Asp Arg Gly Ala Glu Asn Glu Gly Ser Cys His Ser Asp Gln
65                70                75                80
Met Ser Asn Asp Phe Ser Asn Asp Asp Gly Val Asp Glu Gly Ile Cys
      85                90                95
Phe Glu Thr Asn Ser Gly Thr Glu Lys Ile Ser Lys Ser Gly Pro Glu
      100                105                110
Lys Asn

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<210> 3031

<211> 567

<212> DNA

<213> Homo sapiens

<400> 3031

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120
gttggtcctg atgttattcc cctgccacac atctacggag ctccaatcaa aggtgtggaa
180
gtgttctgtc ctctggatcc cccgccgcca tatgaagctg tggtgagcca gatggaccag
240
gagcagggat cttcattcca aatgtcagaa ggatcagaag ctgctgtgat cccattggat
300
ctgggctgca cacaagtgc tcaagatggg gacattccta acatacctgc cgaagaaaat
360
gcatccacct caactcccag ttcaaccctg gtgcgtccta tcagaagccg gagagccctc
420
ccacccttga ggaccaggtc gaagagtgc cctgtgctcc atccttctga ggagagagct
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567

<210> 3032

<211> 189

<212> PRT

<213> Homo sapiens

<400> 3032

Ala	Glu	Glu	Ala	Glu	Asp	His	Gly	Arg	Ile	Pro	Asp	Pro	Asp	Asp	Phe
1				5					10					15	
Val	Pro	Pro	Val	Pro	Pro	Pro	Ser	Tyr	Phe	Ala	Thr	Phe	Tyr	Ser	Cys
			20					25					30		
Thr	Pro	Arg	Met	Asn	Arg	Arg	Leu	Val	Gly	Pro	Asp	Val	Ile	Pro	Leu
		35					40				45				
Pro	His	Ile	Tyr	Gly	Ala	Arg	Ile	Lys	Gly	Val	Glu	Val	Phe	Cys	Pro
	50					55				60					
Leu	Asp	Pro	Pro	Pro	Pro	Tyr	Glu	Ala	Val	Val	Ser	Gln	Met	Asp	Gln
65				70				75						80	
Glu	Gln	Gly	Ser	Ser	Phe	Gln	Met	Ser	Glu	Gly	Ser	Glu	Ala	Ala	Val
			85					90					95		
Ile	Pro	Leu	Asp	Leu	Gly	Cys	Thr	Gln	Val	Thr	Gln	Asp	Gly	Asp	Ile
		100						105				110			
Pro	Asn	Ile	Pro	Ala	Glu	Glu	Asn	Ala	Ser	Thr	Ser	Thr	Pro	Ser	Ser
	115						120				125				
Thr	Leu	Val	Arg	Pro	Ile	Arg	Ser	Arg	Arg	Ala	Leu	Pro	Pro	Leu	Arg
	130					135				140					
Thr	Arg	Ser	Lys	Ser	Asp	Pro	Val	Leu	His	Pro	Ser	Glu	Glu	Arg	Ala
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 <211> 821
 <212> DNA
 <213> Homo sapiens

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<400> 3034
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<211> 697

<212> PRT

<213> Homo sapiens

<400> 3038

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Tyr	Tyr	Tyr	Cys	Asn	Pro	Pro	Pro	Ala	Glu	Lys	Thr	Val	Lys	Lys	Lys	
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<211> 1836

<212> DNA

<213> Homo sapiens

<400> 3039

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<210> 3040

<211> 142

<212> PRT

<213> Homo sapiens

<400> 3040

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      35             40             45
Asp Met Gln His Gly Gln Asp Leu Glu Gly Ala Gln Glu Leu Pro Leu
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			115				120				125				
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<211> 1512

<212> DNA

<213> Homo sapiens

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900	gtgctgggtg	acccaagtgc	ccgcacgcgc	cagaactgca	gcattggccc
960	ctggggacctg	gcgtgggtgg	cgaagatgg	gtgtgtatcc	ggcggtgcac
1020	gatgcccgga	tccgttccca	ttcctggcct	gagtcctgca	ttgtgggctg
1080	gtgggtcagt	gggtacgcat	ggagaacgtg	acagtgctgg	gtgaggacgt
1140	gatgagctct	acctcaacgg	agccagcgtg	ctgccccaca	agtctatttg
1200					

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 1380
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 aaaaaaaaaa aa
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<210> 3042

<211> 360

<212> PRT

<213> Homo sapiens

<400> 3042

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Leu	Thr	Leu	Ser	Thr	Pro	Lys	Pro	Leu	Val	Asp	Phe	Cys	Asn	Lys	Pro
			20					25					30		
Ile	Leu	Leu	His	Gln	Val	Glu	Ala	Leu	Ala	Ala	Ala	Gly	Val	Asp	His
		35					40					45			
Val	Ile	Leu	Ala	Val	Ser	Tyr	Met	Ser	Gln	Val	Leu	Glu	Lys	Glu	Met
	50					55					60				
Lys	Ala	Gln	Glu	Gln	Arg	Leu	Gly	Ile	Arg	Ile	Ser	Met	Ser	His	Glu
65					70				75						80
Glu	Glu	Pro	Leu	Gly	Thr	Ala	Gly	Pro	Leu	Ala	Leu	Ala	Arg	Asp	Leu
				85					90					95	
Leu	Ser	Glu	Thr	Ala	Asp	Pro	Phe	Phe	Val	Leu	Asn	Ser	Asp	Val	Ile
			100						105					110	
Cys	Asp	Phe	Pro	Phe	Gln	Ala	Met	Val	Gln	Phe	His	Arg	His	His	Gly
		115					120					125			
Gln	Glu	Gly	Ser	Ile	Leu	Val	Thr	Lys	Val	Glu	Glu	Pro	Ser	Lys	Tyr
		130					135					140			
Gly	Val	Val	Val	Cys	Glu	Ala	Asp	Thr	Gly	Arg	Ile	His	Arg	Phe	Val
145					150					155					160
Glu	Lys	Pro	Gln	Val	Phe	Val	Ser	Asn	Lys	Ile	Asn	Ala	Gly	Met	Tyr
				165					170					175	
Ile	Leu	Ser	Pro	Ala	Val	Leu	Arg	Arg	Ile	Gln	Leu	Gln	Pro	Thr	Ser
			180						185					190	
Ile	Glu	Lys	Glu	Val	Phe	Pro	Ile	Met	Ala	Lys	Glu	Gly	Gln	Leu	Tyr
		195					200					205			
Ala	Met	Glu	Leu	Gln	Gly	Phe	Trp	Met	Asp	Ile	Gly	Gln	Pro	Lys	Asp
		210				215					220				
Phe	Leu	Thr	Gly	Met	Cys	Leu	Phe	Leu	Gln	Ser	Leu	Arg	Gln	Lys	Gln
225					230					235					240
Pro	Glu	Arg	Leu	Cys	Ser	Gly	Pro	Gly	Ile	Val	Gly	Asn	Val	Leu	Val
				245					250					255	
Asp	Pro	Ser	Ala	Arg	Ile	Gly	Gln	Asn	Cys	Ser	Ile	Gly	Pro	Asn	Val
			260					265					270		
Ser	Leu	Gly	Pro	Gly	Val	Val	Val	Glu	Asp	Gly	Val	Cys	Ile	Arg	Arg

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      275              280              285
Cys Thr Val Leu Arg Asp Ala Arg Ile Arg Ser His Ser Trp Leu Glu
 290              295              300
Ser Cys Ile Val Gly Trp Arg Cys Arg Val Gly Gln Trp Val Arg Met
 305              310              315              320
Glu Asn Val Thr Val Leu Gly Glu Asp Val Ile Val Asn Asp Glu Leu
      325              330              335
Tyr Leu Asn Gly Ala Ser Val Leu Pro His Lys Ser Ile Gly Glu Ser
      340              345              350
Val Pro Glu Pro Arg Ile Ile Met
      355              360

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<210> 3043

<211> 394

<212> DNA

<213> Homo sapiens

<400> 3043

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240
ccagcctttg tttggggact cggaggcaga gtagacagtt acccttacct ctggggttggg
300
gagggtcata ttcttggtat cccaggagg tcaacagggg cttcattttt ctgagggaact
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<210> 3044

<211> 115

<212> PRT

<213> Homo sapiens

<400> 3044

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Met Lys Pro Leu Leu Thr Ser Trp Gly Tyr Gln Glu Tyr Asp Pro Pro
 1              5              10              15
Gln Pro Arg Gly Lys Gly Asn Cys Leu Leu Cys Leu Arg Val Pro Lys
      20              25              30
Gln Arg Leu Gly Asn Ile Ser Leu Lys Leu Glu Asn His Cys Pro Phe
      35              40              45
Asn Asp Thr Gln Pro Glu Asp Pro Lys Thr Gly Ser Pro Leu Lys Cys
      50              55              60
Gln Arg His Val Ser Trp Ser Glu Val Arg Glu Ala Asp Ser Gly Leu
      65              70              75              80
Leu Leu Gly Gln Thr Pro Val Lys Arg Lys Arg Trp His His Glu Thr
      85              90              95
Ser Ser Phe Ser Pro Cys Leu Trp Leu Lys Ala Arg Ala Ser Arg Ser
      100              105              110
Lys Glu Ile

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115

<210> 3045
 <211> 605
 <212> DNA
 <213> Homo sapiens

<400> 3045
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 120
 tcttgggagc cgctggcttg cttatgcaga aaacaagttg attcgatgtc atcagtcctg
 180
 tggaggagcc tgtggagaca acattcagtc ttatactgcc acagtcatta gtgctgctaa
 240
 aacattgaaa agtggcctga caatggtagg gaaagtggg actcagctga caggcacact
 300
 gccttcaggt gtgacagaag atgatgttgc catccacagt aattcacggc ggagtccttt
 360
 ggtcccaggc atcatcacag ttattgacac cgaaaccgtg gagagggcca ggtgtttgtg
 420
 agtggagatc ttgacagtga tggcattgtg gccacttcc ctgccatga gaagccagtg
 480
 tgcgtcatgg cttttaatac aagtggaatg cttctagtca caacagacac ccttggccat
 540
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 600
 cgcgt
 605

<210> 3046
 <211> 72
 <212> PRT
 <213> Homo sapiens

<400> 3046
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 1 5 10 15
 Ser Asp Gly Ile Val Ala His Phe Pro Ala His Glu Lys Pro Val Cys
 20 25 30
 Cys Met Ala Phe Asn Thr Ser Gly Met Leu Leu Val Thr Thr Asp Thr
 35 40 45
 Leu Gly His Asp Phe His Val Phe Gln Ile Leu Thr His Pro Trp Ser
 50 55 60
 Ser Ser Thr Glu Arg Arg Gln Arg
 65 70

<210> 3047
 <211> 391
 <212> DNA
 <213> Homo sapiens

<400> 3047

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 120
 ttggttgagt caggaattca gtttatggat gagccagaaa tggcagtgtt tctgcagaat
 180
 gccaaaaccc tgctaaaaaa aatctcggaa gcatcaaagg catttcagat ggagaaaata
 240
 gaacatggct atgagaacat gaaccacttc acagtcaacc tcaatagaga agaaaagata
 300
 atacgtgaaa ttgactttta cagagaagat gaagatgaag aagaagaaga aggcggagaa
 360
 ggagaaaaag aagagaagga gaagtgggag a
 391

<210> 3048

<211> 122

<212> PRT

<213> Homo sapiens

<400> 3048

Met	Thr	Gln	Val	Ile	Thr	Arg	Thr	Gln	Glu	Glu	Lys	Leu	Glu	His	Val
1				5					10					15	
Arg	Ala	Leu	Ile	Lys	Lys	Tyr	Ser	Asp	His	Leu	Glu	Asn	Val	Ser	Lys
			20					25					30		
Leu	Val	Glu	Ser	Gly	Ile	Gln	Phe	Met	Asp	Glu	Pro	Glu	Met	Ala	Val
		35				40						45			
Phe	Leu	Gln	Asn	Ala	Lys	Thr	Leu	Leu	Lys	Lys	Ile	Ser	Glu	Ala	Ser
	50					55					60				
Lys	Ala	Phe	Gln	Met	Glu	Lys	Ile	Glu	His	Gly	Tyr	Glu	Asn	Met	Asn
65					70					75				80	
His	Phe	Thr	Val	Asn	Leu	Asn	Arg	Glu	Glu	Lys	Ile	Ile	Arg	Glu	Ile
			85							90				95	
Asp	Phe	Tyr	Arg	Glu	Asp	Glu	Asp	Glu	Glu	Glu	Glu	Glu	Gly	Gly	Glu
			100					105					110		
Gly	Glu	Lys	Glu	Glu	Lys	Glu	Lys	Trp	Glu						
		115				120									

<210> 3049

<211> 599

<212> DNA

<213> Homo sapiens

<400> 3049

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 180
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 240
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 300

gaggccagca gcttcacgga ccttgagacc atcgccaacc tgggtctggg tttctgggac
 360
 tcctcgctga atcctccaca agaaagaggg aagccagcag agccccaag agaccgggcc
 420
 cccgattcc ccctagtctc cagcctcagg cccacagccc atgacgcaaa ctgtgcctgt
 480
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 540
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 599

<210> 3050

<211> 177

<212> PRT

<213> Homo sapiens

<400> 3050

Met	Phe	Leu	Val	Arg	Arg	Asp	Ser	Ser	Ser	Lys	Gln	Leu	Val	Leu	Cys
1				5					10					15	
Val	His	Phe	Pro	Ser	Leu	Asn	Glu	Ser	Ser	Ala	Glu	Val	Leu	Glu	Tyr
			20					25					30		
Thr	Ile	Lys	Glu	Glu	Lys	Ser	Ile	Leu	Tyr	Leu	Glu	Gly	Ser	Ala	Leu
		35				40						45			
Val	Phe	Glu	Asp	Ile	Phe	Arg	Leu	Ile	Ala	Phe	Tyr	Cys	Val	Ser	Arg
	50					55					60				
Asp	Leu	Leu	Pro	Phe	Thr	Leu	Arg	Leu	Pro	Gln	Ala	Ile	Leu	Glu	Ala
65					70					75					80
Ser	Ser	Phe	Thr	Asp	Leu	Glu	Thr	Ile	Ala	Asn	Leu	Gly	Leu	Gly	Phe
				85					90					95	
Trp	Asp	Ser	Ser	Leu	Asn	Pro	Pro	Gln	Glu	Arg	Gly	Lys	Pro	Ala	Glu
			100					105					110		
Pro	Pro	Arg	Asp	Arg	Ala	Pro	Gly	Phe	Pro	Leu	Val	Ser	Ser	Leu	Arg
		115					120					125			
Pro	Thr	Ala	His	Asp	Ala	Asn	Cys	Ala	Cys	Glu	Ile	Glu	Leu	Ser	Val
		130				135						140			
Gly	Asn	Asp	Arg	Leu	Trp	Phe	Val	Asn	Pro	Ile	Phe	Ile	Glu	Asp	Cys
145					150					155					160
Ser	Ser	Ala	Leu	Pro	Thr	Asp	Gln	Pro	Pro	Leu	Gly	Asn	Cys	Pro	Ser
				165					170						175

Arg

<210> 3051

<211> 820

<212> DNA

<213> Homo sapiens

<400> 3051

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 120
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 180

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 240
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 300
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 360
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 420
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 660
 cgcggactcg tagcagcaac ggctcagacc ccatggacga ctgctcgtcg tgcaccagcc
 720
 actcgagctc ggagcactac taccggcgcc agatgaacgc caactactcc acgctggcgg
 780
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 820

<210> 3052

<211> 62

<212> PRT

<213> Homo sapiens

<400> 3052

Arg	Leu	Ser	Gly	Tyr	Gln	His	Asn	Ile	Pro	Pro	Thr	Phe	Ser	Ser	Gln
1				5				10						15	
Gly	Thr	Pro	Ser	Ser	Ala	Thr	Val	Ala	Gln	Gln	Ala	Ser	Ser	Ser	Pro
			20					25					30		
Val	Pro	Gly	Gly	Thr	Pro	Thr	Asp	Ala	Leu	Ser	Pro	Xaa	Thr	Thr	Met
		35				40					45				
Thr	Ser	His	Pro	Ser	Ser	Pro	Lys	Cys	Gly	Val	Ser	Pro	Leu		
	50					55					60				

<210> 3053

<211> 2625

<212> DNA

<213> Homo sapiens

<400> 3053

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 120
 cagtttaaaa gatttagaga aactgtacca acttgggata caataagaga tgaagaagat
 180
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 300

gatgttatta atgctatcct taagcaacat acagaagaaa aagaatttgt tgagaagcac
360
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420
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1920

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<210> 3054

<211> 417

<212> PRT

<213> Homo sapiens

<400> 3054

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Glu	Lys	Pro	Glu	Glu	Pro	Pro	Thr	Ser	Asn	Glu	Cys	Leu	Glu	Asp	Ile
			20					25					30		
Thr	Val	Lys	Asp	Gly	Leu	Ser	Leu	Gln	Phe	Lys	Arg	Phe	Arg	Glu	Thr
		35					40					45			
Val	Pro	Thr	Trp	Asp	Thr	Ile	Arg	Asp	Glu	Glu	Asp	Val	Leu	Asp	Glu
	50					55					60				
Leu	Leu	Gln	Tyr	Leu	Gly	Val	Thr	Ser	Pro	Glu	Cys	Leu	Gln	Arg	Thr
65					70					75				80	
Gly	Ile	Ser	Leu	Asn	Ile	Pro	Ala	Pro	Gln	Pro	Val	Cys	Ile	Ser	Glu
				85					90					95	
Lys	Gln	Glu	Asn	Asp	Val	Ile	Asn	Ala	Ile	Leu	Lys	Gln	His	Thr	Glu
			100					105					110		
Glu	Lys	Glu	Phe	Val	Glu	Lys	His	Phe	Asn	Asp	Leu	Asn	Met	Lys	Ala
		115					120					125			
Val	Glu	Gln	Asp	Glu	Pro	Ile	Pro	Gln	Lys	Pro	Gln	Ser	Ala	Phe	Tyr
	130					135					140				
Tyr	Cys	Arg	Leu	Leu	Leu	Ser	Ile	Leu	Gly	Met	Asn	Ser	Trp	Asp	Lys
145				150					155					160	
Arg	Arg	Ser	Phe	His	Leu	Leu	Lys	Lys	Asn	Glu	Lys	Leu	Leu	Arg	Glu
				165					170					175	
Leu	Arg	Asn	Leu	Asp	Ser	Arg	Gln	Cys	Arg	Glu	Thr	His	Lys	Ile	Ala

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                195                200                205
Asn Thr Gly Gly Ser Gln Ala Tyr Glu Asp Phe Val Ala Gly Leu Gly
                210                215                220
Trp Glu Val Asn Leu Thr Asn His Cys Gly Phe Met Gly Gly Leu Gln
225                230                235                240
Lys Asn Lys Ser Thr Gly Leu Thr Thr Pro Tyr Phe Ala Thr Ser Thr
                245                250                255
Val Glu Val Ile Phe His Val Ser Thr Arg Met Pro Ser Asp Ser Asp
                260                265                270
Asp Ser Leu Thr Lys Lys Leu Arg His Leu Gly Asn Asp Glu Val His
                275                280                285
Ile Val Trp Ser Glu His Thr Arg Asp Tyr Arg Arg Gly Ile Ile Pro
290                295                300
Thr Glu Phe Gly Asp Val Leu Ile Val Ile Tyr Pro Met Lys Asn His
305                310                315                320
Met Phe Ser Ile Gln Ile Met Lys Lys Pro Glu Val Pro Phe Phe Gly
                325                330                335
Pro Leu Phe Asp Gly Ala Ile Val Asn Gly Lys Val Leu Pro Ile Met
                340                345                350
Val Arg Ala Thr Ala Ile Asn Ala Ser Arg Ala Leu Lys Ser Leu Ile
                355                360                365
Pro Leu Tyr Gln Asn Phe Tyr Glu Glu Arg Ala Arg Tyr Leu Gln Thr
370                375                380
Ile Val Gln His His Leu Glu Pro Thr Thr Phe Glu Asp Phe Ala Ala
385                390                395                400
Gln Val Phe Ser Pro Ala Pro Tyr His His Leu Pro Ser Asp Ala Asp
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His

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<210> 3055

<211> 905

<212> DNA

<213> Homo sapiens

<400> 3055

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<210> 3056

<211> 195

<212> PRT

<213> Homo sapiens

<400> 3056

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Glu	Lys	Leu	Ser	Leu	Lys	Pro	His	Gln	Gly	Pro	Val	Leu	Arg	Ser	Asn
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<210> 3057

<211> 2169

<212> DNA

<213> Homo sapiens

<400> 3057

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<210> 3058

<211> 298

<212> PRT

<213> Homo sapiens

<400> 3058

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			20					25					30		
Ala	Arg	Arg	Ala	Arg	Lys	Val	Phe	Thr	Val	Ile	Glu	Pro	Val	Asp	Ile
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			50			55				60					
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65				70					75					80	
Ile	Asp	Arg	Lys	Gly	Tyr	Thr	Pro	Gly	Glu	Val	Ile	Pro	Val	Phe	Ala
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			100					105					110		
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			115				120					125			
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			130			135					140				
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145				150					155					160	
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			165					170					175		
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			180					185					190		
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<210> 3059

<211> 1411

<212> DNA

<213> Homo sapiens

<400> 3059

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1020

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<211> 334

<212> PRT

<213> Homo sapiens

<400> 3060

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			20					25					30		
Arg	Thr	Tyr	Ser	Arg	Lys	Lys	Gly	Gly	Arg	Lys	Ser	Arg	Ser	Lys	Ser
		35					40					45			
Arg	Ser	Trp	Ser	Arg	Asp	Leu	Gln	Pro	Arg	Ser	His	Ser	Tyr	Asp	Arg
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Arg	Arg	Arg	His	Arg	Ser	Ser	Ser	Ser	Ser	Ser	Tyr	Gly	Ser	Arg	Arg
65					70					75					80
Lys	Arg	Ser	Arg	Ser	Arg	Ser	Arg	Gly	Arg	Gly	Lys	Ser	Tyr	Arg	Val
				85					90					95	
Gln	Arg	Ser	Arg	Ser	Lys	Ser	Arg	Thr	Arg	Arg	Ser	Arg	Ser	Arg	Pro
			100					105					110		
Arg	Leu	Arg	Ser	His	Ser	Arg	Ser	Ser	Glu	Arg	Ser	Ser	His	Arg	Arg
	115						120					125			
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	130					135					140				
Glu	Lys	Arg	Glu	Lys	Glu	Lys	Asp	Lys	Gly	Lys	Asp	Lys	Glu	Leu	His
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Asn	Ile	Lys	Arg	Gly	Glu	Ser	Gly	Asn	Ile	Lys	Ala	Gly	Leu	Glu	His
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Leu	Pro	Pro	Ala	Glu	Gln	Ala	Lys	Ala	Arg	Leu	Gln	Leu	Val	Leu	Glu
			180					185					190		
Ala	Ala	Ala	Lys	Ala	Asp	Glu	Ala	Leu	Lys	Ala	Lys	Glu	Arg	Asn	Glu
	195						200					205			
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	210					215					220				
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225					230					235					240
Val	Gln	Gln	Thr	Phe	Arg	Ser	Ser	Lys	Glu	Val	Lys	Lys	Ser	Val	Glu
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<212> DNA
<213> Homo sapiens
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<210> 3062
 <211> 146
 <212> PRT
 <213> Homo sapiens

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 35 40 45
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 Leu Pro Ala Ser Arg Ala Leu Ala Thr Pro Pro Lys Leu His Thr Cys
 65 70 75 80
 Glu Lys Cys Ser Thr Ser Ile Ala Asn Gln Ala Val Arg Ile Gln Glu
 85 90 95
 Gly Arg Tyr Arg His Pro Gly Cys Tyr Thr Cys Ala Asp Cys Gly Leu
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<210> 3063
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<212> PRT

<213> Homo sapiens

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			20					25					30		
Tyr	Gln	Cys	Ser	Arg	Pro	Ala	Pro	Leu	His	Ser	Arg	Asp	Leu	His	Ser
		35					40					45			
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65					70				75					80	
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			85					90						95	
Val	Lys	Tyr	Lys	Gly	Asp	Lys	Glu	Pro	Asn	Pro	Ala	Ser	Met	Arg	Val
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<210> 3065

<211> 2104

<212> DNA

<213> Homo sapiens

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2104

<210> 3066

<211> 183

<212> PRT

<213> Homo sapiens

<400> 3066

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Pro Val Gly Glu Glu Ser Ile Ser Asp Ala Glu Lys Val Ala Met Xaa
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Ser Gln Gly Pro Xaa Thr Ala Pro Gly Ser Pro Cys Arg Ser Cys Gly
      65             70             75             80
Thr Cys Cys Thr Arg Gly Thr Xaa Leu Lys Ser Lys Val Phe Leu Leu
      85             90             95
Gln Glu Glu Leu Ala Tyr Tyr Lys Ser Glu Glu Met Glu Glu Asn
      100            105            110
Arg Ile Pro Gln Pro Pro Pro Ile Ala His Pro Arg Thr Ser Pro Gln
      115            120            125
Pro Glu Ser Gly Ile Lys Arg Leu Phe Ser Phe Phe Ser Arg Asp Lys
      130            135            140
Lys Arg Leu Ala Asn Thr Gln Arg Asn Val His Ile Gln Glu Ser Phe
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Gly Gln Trp Ala Asn Thr His Arg Asp Asp Gly Tyr Thr Glu Gln Gly
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Gln Glu Ala Leu Gln His Leu
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<210> 3067

<211> 645

<212> DNA

<213> Homo sapiens

<400> 3067

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<210> 3068
 <211> 204
 <212> PRT
 <213> Homo sapiens

<400> 3068
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 35 40 45
 Arg Glu Pro Thr Ala Gly Ser Pro Pro Cys Ser Leu Pro Arg Pro Asp
 50 55 60
 Leu Gln Pro Pro Ser Thr Pro Pro Pro Pro Val His Lys Glu Gln Lys
 65 70 75 80
 Lys Ser Asp Pro Pro Pro Pro Pro Gly Lys Phe Lys Ser Phe Leu
 85 90 95
 Pro Pro Arg Ser Pro Gly Asn Ser Ala Leu Gly Pro Arg Arg Gly Trp
 100 105 110
 Gly Trp Ile Ala Ala Gly Gly Ala Pro Ala Met Pro Arg Pro Pro Ser
 115 120 125
 Gly Ala Gly Asp Arg Glu Ile Pro Arg Asp Leu Ala Cys Ala Pro Tyr
 130 135 140
 Pro Pro Pro Gly Ala Gly Arg Gly Ser Glu His Arg Ser Ala Pro Gly
 145 150 155 160
 Arg Arg Cys Gly Ser Lys Glu Pro Glu Ala Ala Ala Ser Arg Pro Pro
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 <213> Homo sapiens

<400> 3069
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<210> 3070

<211> 153

<212> PRT

<213> Homo sapiens

<400> 3070

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      20           25           30
Leu Gly Ser Ser Val Leu His Trp Gly Tyr Leu Pro Ser Lys Asp Asp
      35           40           45
Tyr Phe Gln Val Leu Cys Val Ala Asp Val Val Ile Ser Thr Ala Lys
      50           55           60
His Glu Phe Phe Gly Val Ala Met Leu Glu Ala Val Tyr Cys Gly Cys
65           70           75           80
Tyr Pro Leu Cys Pro Lys Asp Leu Val Tyr Pro Glu Ile Phe Pro Ala
      85           90           95
Glu Tyr Leu Tyr Ser Thr Pro Glu Gln Leu Ser Lys Arg Leu Gln Asn
      100          105          110
Phe Cys Lys Arg Pro Asp Ile Ile Arg Lys His Leu Tyr Lys Gly Glu
      115          120          125
Ile Ala Pro Phe Ser Trp Ala Ala Leu His Gly Lys Phe Arg Ser Leu
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<210> 3071

<211> 3343

<212> DNA

<213> Homo sapiens

<400> 3071

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<210> 3072

<211> 349

<212> PRT

<213> Homo sapiens

<400> 3072

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			20					25					30		
Lys	Glu	Ser	Arg	Gly	Leu	Arg	Gln	Gln	Gly	Thr	Ser	Val	Ala	Gln	Ser
			35				40					45			
Gly	Ala	Gln	Ala	Pro	Gly	Arg	Ala	His	Arg	Cys	Ala	His	Cys	Arg	Arg
			50			55				60					
His	Phe	Pro	Gly	Trp	Val	Ala	Leu	Trp	Leu	His	Thr	Arg	Arg	Cys	Gln
65					70				75					80	
Ala	Arg	Leu	Pro	Leu	Pro	Cys	Pro	Glu	Cys	Gly	Arg	Arg	Phe	Arg	His
			85					90					95		
Ala	Pro	Phe	Leu	Ala	Leu	His	Arg	Gln	Val	His	Ala	Ala	Ala	Thr	Pro
			100					105					110		
Asp	Leu	Gly	Phe	Ala	Cys	His	Leu	Cys	Gly	Gln	Ser	Phe	Arg	Gly	Trp

115						120						125					
Val	Ala	Leu	Val	Leu	His	Leu	Arg	Ala	His	Ser	Ala	Ala	Lys	Arg	Pro		
130						135			140								
Ile	Ala	Cys	Pro	Lys	Cys	Glu	Arg	Arg	Phe	Trp	Arg	Arg	Lys	Gln	Leu		
145			150			155			160								
Arg	Ala	His	Leu	Arg	Arg	Cys	His	Pro	Pro	Ala	Pro	Glu	Ala	Arg	Pro		
			165			170			175								
Phe	Ile	Cys	Gly	Asn	Cys	Gly	Arg	Ser	Phe	Ala	Gln	Trp	Asp	Gln	Leu		
			180			185			190								
Val	Ala	His	Lys	Arg	Val	His	Val	Ala	Glu	Ala	Leu	Glu	Glu	Ala	Ala		
195			200			205											
Ala	Lys	Ala	Leu	Gly	Pro	Arg	Pro	Arg	Gly	Arg	Pro	Ala	Val	Thr	Ala		
210			215			220											
Pro	Arg	Pro	Gly	Gly	Asp	Ala	Val	Asp	Arg	Pro	Phe	Gln	Cys	Ala	Cys		
225			230			235			240								
Cys	Gly	Lys	Arg	Phe	Arg	His	Lys	Pro	Asn	Leu	Ile	Ala	His	Arg	Arg		
			245			250			255								
Val	His	Thr	Gly	Glu	Arg	Pro	His	Gln	Cys	Pro	Glu	Cys	Gly	Lys	Arg		
			260			265			270								
Phe	Thr	Asn	Lys	Pro	Tyr	Leu	Thr	Ser	His	Arg	Arg	Ile	His	Thr	Gly		
275			280			285											
Glu	Lys	Pro	Tyr	Pro	Cys	Lys	Glu	Cys	Gly	Arg	Arg	Phe	Arg	His	Lys		
290			295			300											
Pro	Asn	Leu	Leu	Ser	His	Ser	Lys	Ile	His	Xaa	Ser	Asp	Pro	Arg	Gly		
305			310			315			320								
Arg	Pro	Arg	Pro	Pro	Pro	Ala	Arg	Gly	Ala	Pro	Ser	Cys	Gln	Pro	Ala		
			325			330			335								
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<210> 3073

<211> 791

<212> DNA

<213> Homo sapiens

<400> 3073

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<210> 3074

<211> 263

<212> PRT

<213> Homo sapiens

<400> 3074

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			20					25					30		
Ser	Cys	Glu	Phe	Leu	Leu	Ala	Gly	Ala	Gly	Gly	Ala	Gly	Ala	Gly	Ala
		35					40					45			
Ala	Pro	Gly	Pro	His	Leu	Pro	Pro	Arg	Gly	Ser	Val	Pro	Gly	Asp	Pro
	50					55					60				
Val	Arg	Ile	His	Cys	Asn	Ile	Thr	Glu	Ser	Tyr	Pro	Ala	Val	Pro	Pro
65				70					75					80	
Ile	Trp	Ser	Val	Glu	Ser	Asp	Asp	Pro	Asn	Leu	Ala	Ala	Val	Leu	Glu
			85					90						95	
Arg	Leu	Val	Asp	Ile	Lys	Lys	Gly	Asn	Thr	Leu	Leu	Leu	Gln	His	Leu
		100						105					110		
Lys	Arg	Ile	Ile	Ser	Asp	Leu	Cys	Lys	Leu	Tyr	Asn	Leu	Pro	Gln	His
	115					120					125				
Pro	Asp	Val	Glu	Met	Leu	Asp	Gln	Pro	Leu	Pro	Ala	Glu	Gln	Cys	Thr
	130					135					140				
Gln	Glu	Asp	Val	Ser	Ser	Glu	Asp	Glu	Asp	Glu	Glu	Met	Pro	Glu	Asp
145				150					155					160	
Thr	Glu	Asp	Leu	Asp	His	Tyr	Glu	Met	Lys	Glu	Glu	Glu	Pro	Ala	Glu
			165					170						175	
Gly	Lys	Lys	Ser	Glu	Asp	Asp	Gly	Ile	Gly	Lys	Glu	Asn	Leu	Ala	Ile
		180					185					190			
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	195					200					205				
Val	Ser	Gly	Ser	Val	Gln	Ala	Thr	Asp	Arg	Leu	Met	Lys	Glu	Leu	Gln
	210				215					220					
Gly	Tyr	Ile	Thr	Xaa	Ser	Gln	Ser	Phe	Lys	Gly	Gly	Asn	Tyr	Xaa	Ser
225				230					235					240	
Ser	Asn	Ser	Trp	Asn	Asp	Ser	Leu	Tyr	Gly	Trp	Asp	Val	Gln	Leu	Leu
			245					250						255	
Lys	Val	Asp	Gln	Gly	Ser	Val									
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<210> 3075

<211> 603

<212> DNA

<213> Homo sapiens

<400> 3075

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<210> 3076

<211> 201

<212> PRT

<213> Homo sapiens

<400> 3076

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20           25           30
Val Gly Pro Gln Lys Lys Lys Lys Lys Lys Lys Lys Val Leu Gly Gly
35           40           45
Gly Arg Phe Gly Gln Val His Arg Cys Thr Glu Lys Ser Thr Gly Leu
50           55           60
Ala Leu Ala Ala Lys Ile Ile Lys Val Lys Asn Val Lys Asp Arg Glu
65           70           75           80
Asp Val Lys Asn Glu Val Asn Ile Met Asn Gln Leu Ser His Val Asn
85           90           95
Leu Ile Gln Leu Tyr Asp Ala Phe Glu Ser Lys Ser Ser Phe Thr Leu
100          105          110
Ile Met Glu Tyr Val Asp Gly Gly Glu Leu Phe Asp Arg Ile Thr Asp
115          120          125
Glu Lys Tyr His Leu Thr Glu Leu Asp Val Val Leu Phe Thr Arg Gln
130          135          140
Ile Cys Glu Gly Val His Tyr Leu His Gln His Tyr Ile Leu His Leu
145          150          155          160
Asp Leu Lys Pro Glu Asn Ile Leu Cys Val Ser Gln Thr Gly His Gln

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				165						170					175
Ile	Lys	Ile	Ile	Asp	Phe	Gly	Leu	Ala	Arg	Arg	Tyr	Lys	Pro	Arg	Glu
			180						185				190		
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<210> 3077

<211> 1377

<212> DNA

<213> Homo sapiens

<400> 3077

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<210> 3078
 <211> 310
 <212> PRT
 <213> Homo sapiens

<400> 3078
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 Pro Leu Leu Met Pro Glu Ala Arg Leu Leu Ala Glu Ile Gly
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 Ala Val Thr Leu Val Ser Ala Pro Arg Pro Asp Ser Arg His His Ser
 65 70 75 80
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 Gln Ser Ala Leu Ala Ala Glu Ala Arg Glu Thr Arg Arg Gln Glu Leu
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 Leu Glu Lys Ile Thr Glu Gly Gln Ala Ala Lys Lys Gln Lys Leu Glu
 115 120 125
 Gln Ala Ser Gly Ala Ser Ser Gln Glu Ala Gly Ser Ser Gln Ala
 130 135 140
 Ala Lys Glu Asp Glu Thr Ser Asp Gly Gln Ala Ser Gly Glu Gln Glu
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 Glu Ala Gly Pro Ser Ser Gln Ala Gly Pro Ser Asn Gly Val Ala
 165 170 175
 Pro Leu Pro Arg Ser Ala Leu Leu Val Gln Leu Ala Thr Ala Arg Pro
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 Arg Pro Val Lys Ala Arg Pro Leu Asp Trp Arg Val Gln Ser Lys Asp
 195 200 205
 Trp Pro His Ala Gly Arg Pro Ala His Glu Leu Arg Tyr Ser Ile Tyr
 210 215 220
 Arg Asp Leu Trp Glu Arg Gly Phe Phe Leu Ser Ala Ala Gly Lys Phe
 225 230 235 240
 Gly Gly Asp Phe Leu Val Tyr Pro Gly Asp Pro Leu Arg Phe His Ala
 245 250 255
 His Tyr Ile Ala Gln Cys Trp Ala Pro Glu Asp Thr Ile Pro Leu Gln
 260 265 270
 Asp Leu Val Ala Ala Gly Arg Leu Gly Thr Ser Val Arg Lys Thr Leu
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<210> 3079
 <211> 1785

<212> DNA

<213> Homo sapiens

<400> 3079

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<212> PRT
<213> Homo sapiens
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 370 375 380
 Glu Pro Gln Pro Pro His Ser Val Leu Lys Phe Leu Gln Asp Val Phe
 385 390 395 400
 Gly Ser Pro Ala Thr Ala Ala Ile Phe Tyr His Thr Asp Met Met Ala
 405 410 415
 Leu Ile Asp Ile Thr Val Arg His Ile Ala Asp Leu Ser Pro Gly Asp
 420 425 430
 Lys Gly Pro Phe Gly Ala Gly Gln Arg Pro Trp Pro Gly Val Pro Arg
 435 440 445
 Leu Leu Glu Pro Gly Ser Thr Pro Ser Arg Glu Pro His Pro Val Glu
 450 455 460
 Arg Ser Gly Val Pro Ala Leu Thr Ser Ser Trp Ala Ser Gly Cys Pro
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<210> 3081

<211> 1902

<212> DNA

<213> Homo sapiens

<400> 3081

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<210> 3082

<211> 414

<212> PRT

<213> Homo sapiens

<400> 3082

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		35					40					45						
Cys	His	Asp	Asp	Ala	Ala	Lys	Phe	Val	His	Leu	Leu	Met	Ser	Pro	Gly			
	50					55					60							
Cys	Asn	Tyr	Leu	Val	Gln	Glu	Asp	Phe	Val	Pro	Phe	Leu	Gln	Asp	Val			
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Val	Asn	Thr	His	Pro	Gly	Leu	Ser	Phe	Leu	Lys	Glu	Ala	Ser	Glu	Phe			
				85						90				95				
His	Ser	Arg	Tyr	Ile	Thr	Thr	Val	Ile	Gln	Arg	Ile	Phe	Tyr	Ala	Val			
			100					105					110					
Asn	Arg	Ser	Trp	Ser	Gly	Arg	Ile	Thr	Cys	Ala	Glu	Leu	Arg	Arg	Ser			
		115					120					125						
Ser	Phe	Leu	Gln	Asn	Val	Ala	Leu	Leu	Glu	Glu	Glu	Ala	Asp	Ile	Asn			
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Gln	Leu	Thr	Glu	Phe	Phe	Ser	Tyr	Glu	His	Phe	Tyr	Val	Ile	Tyr	Cys			
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Lys	Phe	Trp	Glu	Leu	Asp	Thr	Asp	His	Asp	Leu	Leu	Ile	Asp	Ala	Asp			
					165					170				175				
Asp	Leu	Ala	Arg	His	Asn	Asp	His	Ala	Leu	Ser	Thr	Lys	Met	Ile	Asp			
			180					185					190					
Arg	Ile	Phe	Ser	Gly	Ala	Val	Thr	Arg	Gly	Arg	Lys	Val	Gln	Lys	Glu			
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Asp	Lys	Lys	Thr	Pro	Thr	Ser	Ile	Glu	Tyr	Trp	Phe	Arg	Cys	Met	Asp			
225					230					235				240				
Leu	Asp	Gly	Asp	Gly	Ala	Leu	Ser	Met	Phe	Glu	Leu	Glu	Tyr	Phe	Tyr			
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Glu	Glu	Gln	Cys	Arg	Arg	Leu	Asp	Ser	Met	Ala	Ile	Glu	Ala	Leu	Pro			
			260					265					270					
Phe	Gln	Asp	Cys	Leu	Cys	Gln	Met	Leu	Asp	Leu	Val	Lys	Pro	Arg	Thr			
		275					280					285						
Glu	Gly	Lys	Ile	Thr	Leu	Gln	Asp	Leu	Lys	Arg	Cys	Lys	Leu	Ala	Asn			
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Val	Phe	Phe	Asp	Thr	Phe	Phe	Asn	Ile	Glu	Lys	Tyr	Leu	Asp	His	Glu			
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Gln	Lys	Glu	Gln	Ile	Ser	Leu	Leu	Arg	Asp	Gly	Asp	Ser	Gly	Gly	Pro			
					325					330				335				
Glu	Leu	Ser	Asp	Trp	Glu	Lys	Tyr	Ala	Ala	Glu	Glu	Tyr	Asp	Ile	Leu			
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<210> 3083

<211> 610

<212> DNA

<213> Homo sapiens

<400> 3083

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<210> 3084

<211> 144

<212> PRT

<213> Homo sapiens

<400> 3084

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			20					25					30		
Gln	Arg	Ser	Arg	Leu	His	Ala	Ala	Asp	Trp	Ala	Gly	Arg	Ala	Arg	Ala
			35				40					45			
Leu	Val	Gly	Asp	Ser	His	Thr	Ser	Trp	Ser	Pro	Ala	Ser	Ile	Pro	Gly
	50					55				60					
Lys	His	Tyr	Gln	Ala	Val	Gly	Leu	His	Leu	Trp	Lys	Val	Glu	Lys	Arg
65					70				75					80	
Arg	Val	Asn	Leu	Pro	Arg	Val	Leu	Ser	Met	Pro	Pro	Val	Ala	Gly	Thr
			85					90						95	
Ala	Cys	His	Ala	Tyr	Asp	Arg	Glu	Val	His	Leu	Arg	Cys	Glu	Leu	Ser
			100					105					110		
Pro	Gly	Tyr	Tyr	Leu	Ala	Val	Pro	Ser	Thr	Phe	Leu	Lys	Asp	Ala	Pro
			115				120					125			
Gly	Glu	Phe	Leu	Leu	Arg	Val	Phe	Ser	Thr	Gly	Arg	Val	Ser	Leu	Arg
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<210> 3085

<211> 1080

<212> DNA

<213> Homo sapiens

<400> 3085

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<210> 3086

<211> 58

<212> PRT

<213> Homo sapiens

<400> 3086

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<210> 3087
<211> 2329
<212> DNA
<213> Homo sapiens

<400> 3087
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<210> 3088

<211> 280

<212> PRT

<213> Homo sapiens

<400> 3088

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			20					25					30		
Asp	Asp	Phe	Asp	Pro	Gly	Lys	Lys	Val	Glu	Val	Glu	Pro	Pro	Pro	Asp
		35					40					45			
Arg	Pro	Val	Arg	Ala	Cys	Arg	Thr	Gln	Gln	Pro	Glu	Met	Glu	Arg	Thr
		50				55					60				
His	Ile	Gln	Gln	Leu	Leu	Glu	His	Phe	Leu	Arg	Gln	Leu	Gln	Arg	Lys
65				70					75					80	
Asp	Pro	His	Gly	Phe	Phe	Ala	Phe	Pro	Val	Thr	Asp	Ala	Ile	Ala	Pro
			85					90					95		
Gly	Tyr	Ser	Met	Ile	Ile	Lys	His	Pro	Met	Asp	Phe	Gly	Thr	Met	Lys
			100					105					110		
Asp	Lys	Ile	Val	Ala	Asn	Glu	Tyr	Lys	Ser	Val	Thr	Glu	Phe	Lys	Ala
		115				120						125			
Asp	Phe	Lys	Leu	Met	Cys	Asp	Asn	Ala	Met	Thr	Tyr	Asn	Arg	Pro	Asp

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Thr Val Tyr Tyr Lys Leu Ala Lys Lys Ile Leu His Ala Gly Phe Lys				
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Met Met Ser Lys Gln Ala Ala Leu Leu Gly Asn Glu Asp Thr Ala Val				160
	165		170	175
Glu Glu Pro Val Pro Glu Val Val Pro Val Gln Val Glu Thr Ala Lys				
	180		185	190
Lys Ser Lys Lys Pro Ser Arg Glu Val Ile Ser Cys Met Phe Glu Pro				
	195		200	205
Glu Gly Asn Ala Cys Ser Leu Thr Asp Ser Thr Ala Glu Glu His Val				
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Leu Ala Leu Val Glu His Ala Ala Asp Glu Ala Arg Asp Arg Ile Asn				
225		230		235
Arg Phe Leu Pro Gly Gly Lys Met Gly Tyr Leu Lys Arg Asn Gly Asp				240
	245		250	255
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<210> 3089

<211> 722

<212> DNA

<213> Homo sapiens

<400> 3089

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722

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<211> 240
 <212> PRT
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<400> 3090

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Thr	Ser	Met	Glu	Gly	Asp	Val	Leu	Asp	Thr	Leu	Glu	Ala	Leu	Gly	Tyr
			20					25					30		
Lys	Gly	Pro	Leu	Leu	Glu	Glu	Gln	Ala	Leu	Thr	Lys	Ala	Ala	Glu	Gly
		35					40					45			
Gly	Leu	Ser	Ser	Pro	Glu	Phe	Ser	Glu	Leu	Cys	Ile	Trp	Leu	Gly	Ser
	50					55				60					
Gln	Ile	Lys	Ser	Leu	Cys	Asn	Leu	Glu	Glu	Ser	Ile	Thr	Ser	Ala	Gly
65					70					75				80	
Arg	Asp	Asp	Leu	Glu	Ser	Phe	Gln	Leu	Glu	Ile	Ser	Gly	Phe	Leu	Lys
			85						90					95	
Glu	Met	Ala	Cys	Pro	Tyr	Ser	Val	Leu	Val	Ser	Gly	Asp	Ile	Lys	Glu
		100						105					110		
Arg	Leu	Thr	Lys	Lys	Asp	Asp	Cys	Leu	Lys	Leu	Leu	Leu	Phe	Leu	Ser
	115					120						125			
Thr	Glu	Leu	Gln	Ala	Leu	Gln	Ile	Leu	Gln	Asn	Lys	Lys	His	Lys	Asn
	130					135					140				
Ser	Gln	Leu	Asp	Lys	Asn	Ser	Glu	Val	Tyr	Gln	Glu	Val	Gln	Ala	Met
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Phe	Asp	Thr	Leu	Gly	Ile	Pro	Lys	Ser	Thr	Thr	Ser	Asp	Ile	Pro	His
			165						170					175	
Met	Leu	Asn	Gln	Val	Glu	Ser	Lys	Val	Lys	Asp	Ile	Leu	Ser	Lys	Val
		180						185					190		
Gln	Lys	Asn	His	Val	Gly	Lys	Pro	Leu	Leu	Lys	Met	Asp	Leu	Asn	Ser
	195						200					205			
Glu	Gln	Ala	Glu	Gln	Leu	Glu	Arg	Ile	Asn	Asp	Ala	Leu	Ser	Cys	Glu
	210					215					220				
Tyr	Glu	Cys	Arg	Arg	Arg	Met	Leu	Met	Lys	Arg	Leu	Asp	Val	Thr	Val
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<210> 3091
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 <212> DNA
 <213> Homo sapiens

<400> 3091

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240
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<210> 3092
 <211> 104
 <212> PRT
 <213> Homo sapiens

<400> 3092
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 Ser Arg Lys Arg Glu Pro Arg Asp Gly Val Lys Glu Trp Gly Ser Gln
 35 40 45
 Ala Phe Ser Asn His Phe Gly Thr Leu Gly Arg Arg Gly Arg Pro Gly
 50 55 60
 Gly Thr Lys Gly Leu Gly Cys Ser Leu Ser Val Pro Asp Pro Cys Gln
 65 70 75 80
 Ala Lys Met Val Trp Gln Arg Gly Glu Gln Leu Leu Pro Arg Ala Ser
 85 90 95
 Phe Pro Ser Ala Pro Phe Thr Arg
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<210> 3093
 <211> 720
 <212> DNA
 <213> Homo sapiens

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 240
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<210> 3094

<211> 179
 <212> PRT
 <213> Homo sapiens

<400> 3094

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          20           25           30
Leu Asp Ile Ser Gln Leu Gln Pro Pro Leu Pro Asp Gln Val Val Ile
          35           40           45
Lys Thr Gln Thr Glu Tyr Gln Leu Ser Ser Pro Asp Gln Gln Asn Phe
          50           55           60
Pro Asp Leu Glu Gly Gln Arg Leu Asn Cys Ser His Pro Glu Glu Gly
65           70           75           80
Arg Arg Leu Pro Thr Ala Arg Met Ile Ala Phe Ala Met Ala Leu Leu
          85           90           95
Gly Cys Val Leu Ile Met Tyr Lys Ala Ile Trp Tyr Asp Gln Phe Thr
          100          105          110
Cys Pro Asp Gly Phe Leu Leu Arg His Lys Ile Cys Thr Pro Leu Thr
          115          120          125
Leu Glu Met Tyr Tyr Thr Glu Met Asp Pro Glu Arg His Arg Ser Ile
          130          135          140
Leu Ala Ala Ile Gly Ala Tyr Pro Leu Ser Arg Lys His Gly Thr Glu
145          150          155          160
Thr Pro Ala Ala Trp Gly Asp Gly Tyr Arg Ala Ala Lys Glu Glu Arg
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Lys Gly Pro
  
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<210> 3095
 <211> 519
 <212> DNA
 <213> Homo sapiens

<400> 3095

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<210> 3096
 <211> 159
 <212> PRT
 <213> Homo sapiens

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 Pro Ser Lys Arg Pro Ser Lys Ile Gly Phe Asp Glu Val Phe Val Ile
 35 40 45
 Ser Leu Ala Arg Arg Pro Asp Arg Arg Glu Arg Met Leu Ala Ser Leu
 50 55 60
 Trp Glu Met Glu Ile Ser Gly Arg Val Val Asp Ala Val Asp Gly Trp
 65 70 75 80
 Met Leu Asn Ser Ser Ala Ile Arg Asn Leu Gly Val Asp Leu Leu Pro
 85 90 95
 Gly Tyr Gln Asp Pro Tyr Ser Gly Arg Thr Leu Thr Lys Gly Glu Val
 100 105 110
 Gly Cys Phe Leu Ser His Tyr Ser Ile Trp Glu Glu Arg Ala Val Gln
 115 120 125
 Gly Thr Leu Leu Ala Thr Gly Pro Gly Gly Leu Leu Arg Pro Ala Pro
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 Ala Arg Cys Pro Tyr Pro Leu Cys Arg Gly Arg Arg Val Ala Gln
 145 150 155

<210> 3097
 <211> 4953
 <212> DNA
 <213> Homo sapiens

<400> 3097
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 420
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 480
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<210> 3098

<211> 1359

<212> PRT

<213> Homo sapiens

<400> 3098

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			20					25					30		
Gly	Pro	Ser	Arg	Gly	Ser	Gly	Gly	Gly	Arg	Gly	Gly	Leu	Arg	Ala	
		35				40					45				
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	50					55				60					
Pro	Ala	Gly	Leu	Gly	Pro	Gly	Ala	Met	Ser	Gly	Gly	Gly	Gly	Gly	Gly

65					70					75				80	
Gly	Ser	Ala	Pro	Ser	Arg	Phe	Ala	Asp	Tyr	Phe	Val	Ile	Cys	Gly	Leu
				85					90					95	
Asp	Thr	Glu	Thr	Gly	Leu	Glu	Pro	Asp	Glu	Leu	Ser	Ala	Leu	Cys	Gln
			100					105					110		
Tyr	Ile	Gln	Ala	Ser	Lys	Ala	Arg	Asp	Gly	Ala	Ser	Pro	Phe	Ile	Ser
		115					120					125			
Ser	Thr	Thr	Glu	Gly	Glu	Asn	Phe	Glu	Gln	Thr	Pro	Leu	Arg	Arg	Thr
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Phe	Lys	Ser	Lys	Val	Leu	Ala	Arg	Tyr	Pro	Glu	Asn	Val	Glu	Trp	Asn
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Pro	Phe	Asp	Gln	Asp	Ala	Val	Gly	Met	Leu	Cys	Met	Pro	Lys	Gly	Leu
				165					170					175	
Ala	Phe	Lys	Thr	Gln	Ala	Asp	Pro	Arg	Glu	Pro	Gln	Phe	His	Ala	Phe
			180					185					190		
Ile	Ile	Thr	Arg	Glu	Asp	Gly	Ser	Arg	Thr	Phe	Gly	Phe	Ala	Leu	Thr
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Phe	Tyr	Glu	Glu	Val	Thr	Ser	Lys	Gln	Ile	Cys	Ser	Ala	Met	Gln	Thr
	210					215					220				
Leu	Tyr	His	Met	His	Asn	Ala	Glu	Tyr	Asp	Val	Leu	His	Ala	Pro	Pro
225					230					235					240
Ala	Asp	Asp	Arg	Asp	Gln	Ser	Ser	Met	Glu	Asp	Gly	Glu	Asp	Thr	Pro
				245					250					255	
Val	Thr	Lys	Leu	Gln	Arg	Phe	Asn	Ser	Tyr	Asp	Ile	Ser	Arg	Asp	Thr
		260					265						270		
Leu	Tyr	Val	Ser	Lys	Cys	Ile	Cys	Leu	Ile	Thr	Pro	Met	Ser	Phe	Met
	275					280						285			
Lys	Ala	Cys	Arg	Ser	Val	Pro	Gly	Gln	Leu	His	Gln	Ala	Val	Thr	Ser
	290					295					300				
Pro	Gln	Pro	Pro	Pro	Leu	Pro	Leu	Glu	Ser	Tyr	Ile	Tyr	Asn	Val	Leu
305					310					315					320
Tyr	Glu	Val	Pro	Leu	Pro	Pro	Pro	Gly	Arg	Ser	Leu	Lys	Phe	Ser	Gly
				325					330					335	
Val	Tyr	Trp	Pro	Ile	Ile	Cys	Gln	Arg	Pro	Ser	Thr	Asn	Glu	Leu	Pro
		340						345					350		
Leu	Phe	Asp	Phe	Pro	Val	Lys	Glu	Val	Phe	Glu	Leu	Leu	Gly	Val	Glu
		355					360					365			
Asn	Val	Phe	Gln	Leu	Phe	Thr	Cys	Ala	Leu	Leu	Glu	Phe	Gln	Ile	Leu
	370					375					380				
Leu	Tyr	Ser	Gln	His	Tyr	Gln	Arg	Leu	Met	Thr	Val	Ala	Glu	Thr	Ile
385					390					395					400
Thr	Ala	Leu	Met	Phe	Pro	Phe	Gln	Trp	Gln	His	Val	Tyr	Val	Pro	Ile
				405					410					415	
Leu	Pro	Ala	Ser	Leu	Leu	His	Phe	Leu	Asp	Ala	Pro	Val	Pro	Tyr	Leu
			420					425					430		
Met	Gly	Leu	His	Ser	Asn	Gly	Leu	Asp	Asp	Arg	Ser	Lys	Leu	Glu	Leu
		435					440					445			
Pro	Gln	Glu	Ala	Asn	Leu	Cys	Phe	Val	Asp	Ile	Asp	Asn	His	Phe	Ile
		450				455					460				
Glu	Leu	Pro	Glu	Asp	Leu	Pro	Gln	Phe	Pro	Asn	Lys	Leu	Glu	Phe	Val
465					470					475					480
Gln	Glu	Val	Ser	Glu	Ile	Leu	Met	Ala	Phe	Gly	Ile	Pro	Pro	Glu	Gly
				485					490					495	
Asn	Leu	His	Cys	Ser	Glu	Ser	Ala	Ser	Lys	Leu	Lys	Arg	Leu	Arg	Ala

2314

930	935	940
Asn Ile Gly Glu Ile Lys Thr Asp Val Gly Lys Ala Arg Ala Trp Val		
945	950	955
Arg Leu Ser Met Glu Lys Lys Leu Leu Ser Arg His Leu Lys Gln Leu		960
	965	970
Leu Ser Asp His Glu Leu Thr Lys Lys Leu Tyr Lys Arg Tyr Ala Phe		975
	980	985
Leu Arg Cys Asp Asp Glu Lys Glu Gln Phe Leu Tyr His Leu Leu Ser		990
	995	1000
Phe Asn Ala Val Asp Tyr Phe Cys Phe Thr Asn Val Phe Thr Thr Ile		1005
	1010	1015
Leu Ile Pro Tyr His Ile Leu Ile Val Pro Ser Lys Lys Leu Gly Gly		1020
1025	1030	1035
Ser Met Phe Thr Ala Asn Pro Trp Ile Cys Ile Ser Gly Glu Leu Gly		1040
	1045	1050
Glu Thr Gln Ile Met Gln Ile Pro Arg Asn Val Leu Glu Met Thr Phe		1055
	1060	1065
Glu Cys Gln Asn Leu Gly Lys Leu Thr Thr Val Gln Ile Gly His Asp		1070
	1075	1080
Asn Ser Gly Leu Tyr Ala Lys Trp Leu Val Glu Tyr Val Met Val Arg		1085
	1090	1095
Asn Glu Ile Thr Gly His Thr Tyr Lys Phe Pro Cys Gly Arg Trp Leu		1100
1105	1110	1115
Gly Lys Gly Met Asp Asp Gly Ser Leu Glu Arg Ile Leu Val Gly Glu		1120
	1125	1130
Leu Leu Thr Ser Gln Pro Glu Val Asp Glu Arg Pro Cys Arg Thr Pro		1135
	1140	1145
Pro Leu Gln Gln Ser Pro Ser Val Ile Arg Arg Leu Val Thr Ile Ser		1150
	1155	1160
Pro Asn Asn Lys Pro Lys Leu Asn Thr Gly Gln Ile Gln Glu Ser Ile		1165
	1170	1175
Gly Glu Ala Val Asn Gly Ile Val Lys His Phe His Lys Pro Glu Lys		1180
1185	1190	1195
Glu Arg Gly Ser Leu Thr Leu Leu Leu Cys Gly Glu Cys Gly Leu Val		1200
	1205	1210
Ser Ala Leu Glu Gln Ala Phe Gln His Gly Phe Lys Ser Pro Arg Leu		1215
	1220	1225
Phe Lys Asn Val Phe Ile Trp Asp Phe Leu Glu Lys Ala Gln Thr Tyr		1230
	1235	1240
Tyr Glu Thr Leu Glu Lys Asn Glu Val Val Pro Glu Glu Asn Trp His		1245
	1250	1255
Thr Arg Ala Arg Asn Phe Cys Arg Phe Val Thr Ala Ile Asn Asn Thr		1260
1265	1270	1275
Pro Arg Asn Ile Gly Lys Asp Gly Lys Phe Gln Met Leu Val Cys Leu		1280
	1285	1290
Gly Ala Arg Asp His Leu Leu His His Trp Ile Ala Leu Leu Ala Asp		1295
	1300	1305
Cys Pro Ile Thr Ala His Met Tyr Glu Asp Val Ala Leu Ile Lys Asp		1310
	1315	1320
His Thr Leu Val Asn Ser Leu Ile Arg Val Leu Gln Thr Leu Gln Glu		1325
	1330	1335
Phe Asn Ile Thr Leu Glu Thr Ser Leu Val Lys Gly Ile Asp Ile		1340
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<210> 3099
 <211> 1001
 <212> DNA
 <213> Homo sapiens

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 120
 aatgcagttc atgggtgggt tttagggaaa ataatgtgca aaataacttc agccttgtag
 180
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 240
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 360
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 420
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 780
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 840
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 900
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 1001

<210> 3100
 <211> 159
 <212> PRT
 <213> Homo sapiens

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 20 25 30
 Phe Thr Leu Pro Phe Trp Ala Val Asn Ala Val His Gly Trp Val Leu
 35 40 45
 Gly Lys Ile Met Cys Lys Ile Thr Ser Ala Leu Tyr Thr Leu Asn Phe

50	55	60
Val Ser Gly Met Gln Phe Leu Ala Cys Ile Ser Ile Asp Arg Tyr Val		
65	70	75
Ala Val Thr Lys Val Pro Ser Gln Ser Gly Val Gly Lys Pro Cys Trp		80
	85	90
Ile Ile Cys Phe Cys Val Trp Met Ala Ala Ile Leu Leu Ser Ile Pro		95
	100	105
Gln Leu Val Phe Tyr Thr Val Asn Asp Asn Ala Arg Cys Ile Pro Ile		110
	115	120
Phe Pro Arg Tyr Leu Gly Thr Ser Met Lys Ala Leu Ile His Met Leu		125
	130	135
Glu Ile Cys Ile Gly Phe Val Val Pro Phe Leu Ile Met Gly Val		140
145	150	155

<210> 3101

<211> 2623

<212> DNA

<213> Homo sapiens

<400> 3101

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 180
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 240
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 300
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 1920
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 2340
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 2460
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 2520
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<210> 3102
 <211> 410
 <212> PRT
 <213> Homo sapiens

<400> 3102

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		20						25					30		
Gln	Tyr	Ala	Gly	Pro	Gly	Leu	Ser	Leu	Gly	Ala	Pro	Gly	Gly	Arg	Ala
		35					40					45			
Pro	Pro	Asp	Asp	Leu	Asp	Leu	Phe	Pro	Thr	Pro	Asp	Pro	His	Tyr	Glu
	50					55					60				
Lys	Lys	Tyr	Tyr	Phe	Pro	Val	Arg	Glu	Leu	Glu	Arg	Ser	Leu	Arg	Phe
65					70					75					80
Asp	Met	Lys	Gly	Asp	Asp	Val	Ile	Val	Phe	Leu	His	Ile	Gln	Lys	Thr
				85					90					95	
Gly	Gly	Thr	Thr	Phe	Gly	Arg	His	Leu	Val	Gln	Asn	Val	Arg	Leu	Glu
			100					105					110		
Val	Pro	Cys	Asp	Cys	Arg	Pro	Gly	Gln	Lys	Lys	Cys	Thr	Cys	Tyr	Arg
		115					120					125			
Pro	Asn	Arg	Arg	Glu	Thr	Trp	Leu	Phe	Ser	Arg	Phe	Ser	Thr	Gly	Trp
	130					135					140				
Ser	Cys	Gly	Leu	His	Ala	Asp	Trp	Thr	Glu	Leu	Thr	Asn	Cys	Val	Pro
145					150					155					160
Gly	Val	Leu	Asp	Arg	Arg	Asp	Ser	Ala	Ala	Leu	Arg	Thr	Pro	Arg	Lys
			165					170						175	
Phe	Tyr	Tyr	Ile	Thr	Leu	Leu	Arg	Asp	Pro	Val	Ser	Arg	Tyr	Leu	Ser
		180						185					190		
Glu	Trp	Arg	His	Val	Gln	Arg	Gly	Ala	Thr	Trp	Lys	Thr	Ser	Leu	His
	195						200					205			
Met	Cys	Asp	Gly	Arg	Thr	Pro	Thr	Pro	Glu	Glu	Leu	Pro	Pro	Cys	Tyr
	210					215					220				
Glu	Gly	Thr	Asp	Trp	Ser	Gly	Cys	Thr	Leu	Gln	Glu	Phe	Met	Asp	Cys
225					230					235					240
Pro	Tyr	Asn	Leu	Ala	Asn	Asn	Arg	Gln	Val	Arg	Met	Leu	Ala	Asp	Leu
			245					250						255	
Ser	Leu	Val	Gly	Cys	Tyr	Asn	Leu	Ser	Phe	Ile	Pro	Glu	Gly	Lys	Arg
		260						265					270		
Ala	Gln	Leu	Leu	Glu	Ser	Ala	Lys	Lys	Asn	Leu	Arg	Gly	Met	Ala	
	275					280						285			
Phe	Phe	Gly	Leu	Thr	Glu	Phe	Gln	Arg	Lys	Thr	Gln	Tyr	Leu	Phe	Glu
	290					295					300				
Arg	Thr	Phe	Asn	Leu	Lys	Phe	Ile	Arg	Pro	Phe	Met	Gln	Tyr	Asn	Ser
305					310					315					320
Thr	Arg	Ala	Gly	Gly	Val	Glu	Val	Asp	Glu	Asp	Thr	Ile	Arg	Arg	Ile
			325					330						335	
Glu	Glu	Leu	Asn	Asp	Leu	Asp	Met	Gln	Leu	Tyr	Asp	Tyr	Ala	Lys	Asp
		340						345					350		
Leu	Phe	Gln	Arg	Tyr	Gln	Tyr	Lys	Arg	Gln	Leu	Glu	Arg	Arg	Glu	
	355					360					365				
Gln	Arg	Leu	Arg	Ser	Arg	Glu	Glu	Arg	Leu	Leu	His	Arg	Ala	Lys	Glu

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Ala Leu Pro Arg Glu Asp Ala Asp Glu Pro Gly Arg Val Pro Thr Glu		
385	390	395
Asp Tyr Met Ser His Ile Ile Glu Lys Trp		400
405	410	

<210> 3103
 <211> 1228
 <212> DNA
 <213> Homo sapiens

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 1140
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 1228

<210> 3104
 <211> 144
 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Ala Ala Ala Trp Gln Arg Ala Ser Leu Gly Gln Trp Xaa Arg Arg Pro
 50 55 60
 Val Ala Ala Leu Ala Pro Tyr Ser Asp Ser Leu Val Glu Pro Leu Val
 65 70 75 80
 Cys Arg Leu Gln Val Leu Phe Leu Lys Lys Ala Gly Ser Glu Arg Pro
 85 90 95
 Cys Glu Thr Thr Pro Gly Ala Lys Gly Asp Ser His Lys Thr Gln Val
 100 105 110
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 115 120 125
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 130 135 140

<210> 3105
 <211> 4924
 <212> DNA
 <213> Homo sapiens

<400> 3105
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<211> 959

<212> DNA

<213> Homo sapiens

<400> 3109

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<210> 3110

<211> 207

<212> PRT

<213> Homo sapiens

<400> 3110

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			20					25					30		
Trp	Ser	Pro	Asp	Gly	Arg	His	Ile	Leu	Asn	Thr	Thr	Glu	Phe	His	Leu
		35					40					45			
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	50					55					60				
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65					70				75					80	
Tyr	Met	Ala	Leu	Ala	Glu	Arg	Arg	Asp	Cys	Lys	Asp	Tyr	Val	Ser	Ile
			85					90					95		
Phe	Val	Cys	Ser	Asp	Trp	Gln	Leu	Leu	Arg	His	Phe	Asp	Thr	Asp	Thr
			100				105						110		
Gln	Asp	Leu	Thr	Gly	Ile	Glu	Trp	Ala	Pro	Asn	Gly	Cys	Val	Leu	Ala
	115					120					125				
Val	Trp	Asp	Thr	Cys	Leu	Glu	Tyr	Lys	Ile	Leu	Leu	Tyr	Ser	Leu	Asp
	130				135					140					
Gly	Arg	Leu	Leu	Ser	Thr	Tyr	Ser	Ala	Xaa	Arg	Val	Val	Xaa	Leu	Gly

145		150		155		160									
Ile	Lys	Ser	Val	Ala	Trp	Ser	Pro	Ser	Ser	Gln	Phe	Leu	Ala	Val	Gly
				165				170						175	
Ser	Tyr	Asp	Gly	Lys	Val	Arg	Ile	Leu	Asn	His	Val	Thr	Trp	Lys	Met
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<210> 3111

<211> 1269

<212> DNA

<213> Homo sapiens

<400> 3111

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240
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300
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360
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420
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480
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 gtcaccac
 1269

<210> 3112
 <211> 151
 <212> PRT
 <213> Homo sapiens

<400> 3112
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 Glu Gly Arg Arg Gly Ala Arg Thr Ala Gly Leu Arg Gly Arg Pro Trp
 35 40 45
 Arg Asp Trp Glu Glu Arg Arg Gly Val Thr Thr Val Gln His Pro Glu
 50 55 60
 Lys Ser Asp Trp Gln Thr Arg Thr Gly Gln Pro Cys Ser Cys Met Ile
 65 70 75 80
 Gln Glu Leu Ala Ser Glu Arg Glu Ser Val Ala Glu Ala Gly Gly Ser
 85 90 95
 Ala Arg Gln Lys Val Arg Gly Leu Val Leu Arg Arg Gly Lys Arg Gln
 100 105 110
 Ser Glu Ser Leu His Ala Pro Gly Leu His Gly Arg Ala Arg Ala Ser
 115 120 125
 Gln Lys Arg Val Asn Asp Pro Glu Cys Asp Trp Glu Gly Glu Leu Ile
 130 135 140
 Pro Tyr Gln Glu Thr Gly Ser
 145 150

<210> 3113
 <211> 631
 <212> DNA
 <213> Homo sapiens

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 ccaaaagggga aggagatagt aagcctgctg gaaagaaaca tcaccgtgac aatgtacatc
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<210> 3114
 <211> 210
 <212> PRT
 <213> Homo sapiens

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 Ile Val Ala Ile Met Ile Pro Glu Pro Lys Gly Lys Glu Ile Val Ser
 35 40 45
 Leu Leu Glu Arg Asn Ile Thr Val Thr Met Tyr Ile Thr Ile Gly Thr
 50 55 60
 Arg Asn Leu Gln Lys Tyr Val Ser Arg Thr Ser Val Val Phe Val Ser
 65 70 75 80
 Ile Ser Phe Ile Val Leu Met Ile Ile Ser Leu Ala Trp Leu Val Phe
 85 90 95
 Tyr Tyr Ile Gln Arg Phe Arg Tyr Ala Asn Ala Arg Asp Arg Asn Gln
 100 105 110
 Arg Arg Leu Gly Asp Ala Ala Lys Lys Ala Ile Ser Lys Leu Gln Ile
 115 120 125
 Arg Thr Ile Lys Lys Gly Asp Lys Glu Thr Glu Ser Asp Phe Asp Asn
 130 135 140
 Cys Ala Val Cys Ile Glu Gly Tyr Lys Pro Asn Asp Val Val Arg Ile
 145 150 155 160
 Leu Pro Cys Arg His Leu Phe His Lys Ser Cys Val Asp Pro Trp Leu
 165 170 175
 Leu Asp His Arg Thr Cys Pro Met Cys Lys Met Asn Ile Leu Lys Ala
 180 185 190
 Leu Gly Ile Pro Pro Asn Ala Asp Cys Met Asp Asp Phe Ala Thr Asp
 195 200 205
 Phe Glu
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<210> 3115
 <211> 1366
 <212> DNA
 <213> Homo sapiens

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 180

ctatactttg cacaatcaga gaatatagct gctcatgaga attgtttgct gtattcttca
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 360
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 420
 aagaaggacg acgcagttcc acagtctgat ggagttcgag gaatttataa actgctttgc
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 aatattagac aaagttcatt caattccaga aaaactcatg gatgagacta cttcagaatc
 780
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 840
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<210> 3116

<211> 191

<212> PRT

<213> Homo sapiens

<400> 3116

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			20					25				30			
Leu	Leu	Tyr	Ser	Ser	Gly	Leu	Val	Glu	Cys	Glu	Asp	Gln	Asp	Pro	Leu
		35					40				45				
Asn	Pro	Asp	Arg	Ser	Phe	Asp	Val	Glu	Ser	Val	Lys	Lys	Glu	Ile	Gln

50	55	60
Arg Gly Arg Lys Leu Lys Cys Lys Phe Cys His Lys Arg Gly Ala Thr		
65	70	75
Val Gly Cys Asp Leu Lys Asn Cys Asn Lys Asn Tyr His Phe Phe Cys		80
	85	90
Ala Lys Lys Asp Asp Ala Val Pro Gln Ser Asp Gly Val Arg Gly Ile		95
	100	105
Tyr Lys Leu Cys Gln Gln His Ala Gln Phe Pro Ile Ile Ala Gln		110
	115	120
Ser Gly Lys Phe Ser Gly Val Lys Arg Lys Arg Gly Arg Lys Lys Pro		125
	130	135
Leu Ser Gly Asn His Val Gln Pro Pro Glu Thr Met Lys Cys Asn Thr		140
145	150	155
Phe Ile Arg Gln Val Lys Glu Glu His Gly Arg His Thr Asp Ala Thr		160
	165	170
Val Lys Val Pro Phe Leu Lys Lys Cys Lys Xaa Ser Arg Thr Ser		175
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<210> 3117

<211> 1373

<212> DNA

<213> Homo sapiens

<400> 3117

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900

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<210> 3118

<211> 312

<212> PRT

<213> Homo sapiens

<400> 3118

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Ser	Ser	Ile	Ser	Cys	Gln	Pro	Pro	Ala	Glu	Ile	Pro	Gly	Tyr	Leu	Pro
			20					25					30		
Ala	Asp	Thr	Val	His	Leu	Ala	Val	Glu	Phe	Phe	Asn	Leu	Thr	His	Leu
		35					40					45			
Pro	Ala	Asn	Leu	Leu	Gln	Gly	Ala	Ser	Lys	Leu	Gln	Glu	Leu	His	Leu
	50					55					60				
Ser	Ser	Asn	Gly	Leu	Glu	Ser	Leu	Ser	Pro	Glu	Phe	Leu	Arg	Pro	Val
65					70					75					80
Pro	Gln	Leu	Arg	Val	Leu	Asp	Leu	Thr	Arg	Asn	Ala	Leu	Thr	Gly	Leu
				85					90					95	
Pro	Pro	Gly	Leu	Phe	Gln	Ala	Ser	Ala	Thr	Leu	Asp	Thr	Leu	Val	Leu
			100					105					110		
Lys	Glu	Asn	Gln	Leu	Glu	Val	Leu	Glu	Val	Ser	Trp	Leu	His	Gly	Leu
		115					120					125			
Lys	Ala	Leu	Gly	His	Leu	Asp	Leu	Ser	Gly	Asn	Arg	Leu	Arg	Lys	Leu
	130					135					140				
Pro	Pro	Gly	Leu	Leu	Ala	Asn	Phe	Thr	Leu	Leu	Arg	Thr	Leu	Asp	Leu
145					150					155					160
Gly	Glu	Asn	Gln	Leu	Glu	Thr	Leu	Pro	Pro	Asp	Leu	Leu	Arg	Gly	Pro
			165						170					175	
Leu	Gln	Leu	Glu	Arg	Leu	His	Leu	Glu	Gly	Asn	Lys	Leu	Gln	Val	Leu
			180					185					190		
Gly	Lys	Asp	Leu	Leu	Leu	Pro	Gln	Pro	Asp	Leu	Arg	Tyr	Leu	Phe	Leu
		195					200						205		
Ser	Gly	Asn	Lys	Leu	Ala	Arg	Val	Ala	Ala	Gly	Ala	Phe	Gln	Gly	Leu
	210					215						220			
Arg	Gln	Leu	Asp	Met	Leu	Asp	Leu	Ser	Asn	Asn	Ser	Leu	Ala	Ser	Val
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Pro	Glu	Gly	Leu	Trp	Ala	Ser	Leu	Gly	Gln	Pro	Asn	Trp	Asp	Met	Arg

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<211> 427
<212> DNA
<213> Homo sapiens
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<210> 3120
<211> 142
<212> PRT
<213> Homo sapiens
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2338

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	130	135	140		

<210> 3121
 <211> 284
 <212> DNA
 <213> Homo sapiens

<400> 3121
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 120
 taagaggaac atgaacctgg acggggcagc ttccattgtc cctctcctgc tctgtcta
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 284

<210> 3122
 <211> 91
 <212> PRT
 <213> Homo sapiens

<400> 3122
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 Gly Pro Ser Glu Asp Phe Ser Thr Ser Ala Ala Thr Ser Ala Ala Ser
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 Ser His Val Arg Arg Asn Lys Arg Asn Met Asn Leu Asp Gly Ala Ala
 35 40 45
 Ser Ile Val Pro Leu Leu Leu Leu Met Asn Lys Ala Ser Pro Glu
 50 55 60
 Tyr Glu Glu Asn Met His Arg Tyr Gln Lys Ala Ala Lys Leu Phe Arg
 65 70 75 80
 Gly Arg Phe Ser Leu Phe Trp Trp Thr Val Val
 85 90

<210> 3123
 <211> 344
 <212> DNA
 <213> Homo sapiens

<400> 3123
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 120
 gcagcccagg tgaccttcag aaagacattg gagaaggaag caaagggaga ggagcccagc
 180
 atcgagctcc ccaagttcaa acagaggaag ggggagtccg acggggccta tatccaccgc
 240

atgcagcaag aggccagca tgtgctgttc ctcagcaaga accaggccat ccggcagcca
 300
 gaggtgcagg cagctcccaa ggagaagtct gagcagaaaa aagc
 344

<210> 3124
 <211> 92
 <212> PRT
 <213> Homo sapiens

<400> 3124
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 20 25 30
 Lys Gly Glu Glu Pro Asp Ile Ala Val Pro Lys Phe Lys Gln Arg Lys
 35 40 45
 Gly Glu Ser Asp Gly Ala Tyr Ile His Arg Met Gln Gln Glu Ala Gln
 50 55 60
 His Val Leu Phe Leu Ser Lys Asn Gln Ala Ile Arg Gln Pro Glu Val
 65 70 75 80
 Gln Ala Ala Pro Lys Glu Lys Ser Glu Gln Lys Lys
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<210> 3125
 <211> 647
 <212> DNA
 <213> Homo sapiens

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 ggtcagcagg cagtttagtt gtgggagtat ttccaatttg catgaatgaa acatggacaa
 180
 ataagataag gctggctcca gggaagtaat tccccagtt cccctgagcc ttggatctgg
 240
 aaaactgcag cccatcctgg aattagggaa catcacaaaa cgtactgggg agaactcccc
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 360
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 420
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 480
 ctgattcatc catcaagaca aataaactca gtctatggag gttagcaggg caatttgtga
 540
 agcaaacaaa agttgagttt tggaaagggg ctctgaagaa aatgaagatg acataccagg
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<210> 3126

<211> 116
 <212> PRT
 <213> Homo sapiens

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 His Arg Leu Ser Leu Phe Val Leu Met Asp Glu Ser Glu Ser Gln Thr
 35 40 45
 His Leu Phe Cys Ser Ser Ser Leu Gly Arg Glu His Arg Lys Met Gly
 50 55 60
 Phe Ala Tyr Val Cys Val Trp Gly Gly Leu Phe Phe Leu Cys Phe Ser
 65 70 75 80
 Val Leu Ala Ile Ala Cys Gly Arg Ala Gly Thr Trp Asp Leu Ala Arg
 85 90 95
 Leu Leu Ala Trp Ala Glu Ala Thr Trp Gly Val Leu Pro Ser Thr Phe
 100 105 110
 Cys Asp Val Pro
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<210> 3127
 <211> 2218
 <212> DNA
 <213> Homo sapiens

<400> 3127
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<210> 3128

<211> 565

<212> PRT

<213> Homo sapiens

<400> 3128

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 20          25          30
Gln Glu Gly Lys Ile Pro Asp Glu Thr Leu Glu Lys Leu Lys Ser Leu
 35          40          45
Gly Leu Phe Gly Leu Gln Val Pro Glu Glu Tyr Gly Gly Leu Gly Phe
 50          55          60
Ser Asn Thr Met Tyr Ser Arg Leu Gly Glu Ile Ile Ser Met Asp Gly
 65          70          75          80
Ser Ile Thr Val Thr Leu Ala Ala His Gln Ala Ile Gly Leu Lys Gly
 85          90          95
Ile Ile Leu Ala Gly Thr Glu Glu Gln Lys Ala Lys Tyr Leu Pro Lys
100          105          110
Leu Ala Ser Gly Glu His Ile Ala Ala Phe Cys Leu Thr Glu Pro Ala
115          120          125
Ser Gly Ser Asp Ala Ala Ser Ile Arg Ser Arg Ala Thr Leu Ser Glu
130          135          140
Asp Lys Lys His Tyr Ile Leu Asn Gly Ser Lys Val Trp Ile Thr Asn
145          150          155          160
Gly Gly Leu Ala Asn Ile Phe Thr Val Phe Ala Lys Thr Glu Val Val
165          170          175
Asp Ser Asp Gly Ser Val Lys Asp Lys Ile Thr Ala Phe Ile Val Glu
180          185          190
Arg Asp Phe Gly Gly Val Thr Asn Gly Lys Pro Glu Asp Lys Leu Gly
195          200          205
Ile Arg Gly Ser Asn Thr Cys Glu Val His Phe Glu Asn Thr Lys Ile
210          215          220
Pro Val Glu Asn Ile Leu Gly Glu Val Gly Asp Gly Phe Lys Val Ala
225          230          235          240
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245          250          255
Gly Leu Leu Lys Arg Leu Ile Glu Met Thr Ala Glu Tyr Ala Cys Thr
260          265          270
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275          280          285
Lys Phe Ala Leu Met Ala Gln Lys Ala Tyr Val Met Glu Ser Met Thr
290          295          300
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Asp Tyr Pro Tyr Glu Arg Ile Leu Arg Asp Thr Arg Ile Leu Leu Ile
355          360          365
Phe Glu Gly Thr Asn Glu Ile Leu Arg Met Tyr Ile Ala Leu Thr Gly
370          375          380
Leu Gln His Ala Gly Arg Ile Leu Thr Thr Arg Ile His Glu Leu Lys
385          390          395          400
Gln Ala Lys Val Ser Thr Val Met Asp Thr Val Gly Arg Arg Leu Arg
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Asp Ser Leu Gly Arg Thr Val Asp Leu Gly Leu Thr Gly Asn His Gly

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[illegible]

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<210> 3129
<211> 1964
<212> DNA
<213> Homo sapiens
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<400> 3129
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840

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<210> 3130

<211> 273

<212> PRT

<213> Homo sapiens

<400> 3130

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			20				25					30			
Gly	Pro	Gly	Ala	Ala	Gln	Glu	Pro	Thr	Trp	Leu	Thr	Asp	Val	Pro	Ala
		35				40					45				
Ala	Met	Glu	Phe	Ile	Ala	Ala	Thr	Glu	Val	Ala	Val	Ile	Gly	Phe	Phe
	50					55					60				
Gln	Asp	Leu	Glu	Ile	Pro	Ala	Val	Pro	Ile	Leu	His	Ser	Met	Val	Gln

65					70					75				80	
Lys	Phe	Pro	Gly	Val	Ser	Phe	Gly	Ile	Ser	Thr	Asp	Ser	Glu	Val	Leu
				85					90					95	
Thr	His	Tyr	Asn	Ile	Thr	Gly	Asn	Thr	Ile	Cys	Leu	Phe	Arg	Leu	Val
			100					105					110		
Asp	Asn	Glu	Gln	Leu	Asn	Leu	Glu	Asp	Glu	Asp	Ile	Glu	Ser	Ile	Asp
		115					120					125			
Ala	Thr	Lys	Leu	Ser	Arg	Phe	Ile	Glu	Ile	Asn	Ser	Leu	His	Met	Val
	130					135					140				
Thr	Glu	Tyr	Asn	Pro	Val	Thr	Val	Ile	Gly	Leu	Phe	Asn	Ser	Val	Ile
145				150						155					160
Gln	Ile	His	Leu	Leu	Ile	Met	Asn	Lys	Ala	Ser	Pro	Glu	Tyr	Glu	
			165					170						175	
Glu	Asn	Met	His	Arg	Tyr	Gln	Lys	Ala	Ala	Lys	Leu	Phe	Gln	Gly	Lys
		180						185					190		
Ile	Leu	Phe	Ile	Leu	Val	Asp	Ser	Gly	Met	Lys	Glu	Asn	Gly	Lys	Val
	195						200					205			
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	210					215					220				
Tyr	Gln	Thr	Leu	Asp	Asp	Glu	Trp	Asp	Thr	Leu	Pro	Thr	Ala	Glu	Val
225				230						235					240
Ser	Val	Glu	His	Val	Gln	Asn	Phe	Cys	Asp	Gly	Phe	Leu	Ser	Gly	Lys
			245					250						255	
Leu	Leu	Lys	Glu	Asn	Arg	Glu	Ser	Lys	Arg	Lys	Thr	Pro	Lys	Val	Glu
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<210> 3131

<211> 1544

<212> DNA

<213> Homo sapiens

<400> 3131

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600

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<210> 3132

<211> 283

<212> PRT

<213> Homo sapiens

<400> 3132

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Gly	Ser	Thr	Gly	Thr	Ala	Glu	Gly	Gly	Asn	Met	Ser	Arg	Leu	Ser	Leu
			20					25					30		
Thr	Arg	Ser	Pro	Val	Ser	Pro	Leu	Ala	Ala	Gln	Gly	Ile	Pro	Leu	Pro
		35					40					45			
Ala	Gln	Leu	Thr	Lys	Ser	Asn	Ala	Pro	Val	His	Ile	Asp	Val	Gly	Gly
	50					55					60				
His	Met	Tyr	Thr	Ser	Ser	Leu	Ala	Thr	Leu	Thr	Lys	Tyr	Pro	Glu	Ser
65				70					75					80	
Arg	Ile	Gly	Arg	Leu	Phe	Asp	Gly	Thr	Glu	Pro	Ile	Val	Leu	Asp	Ser
			85					90					95		
Leu	Lys	Gln	His	Tyr	Phe	Ile	Asp	Arg	Asp	Gly	Gln	Met	Phe	Arg	Tyr
		100						105				110			
Ile	Leu	Asn	Phe	Leu	Arg	Thr	Ser	Lys	Leu	Leu	Ile	Pro	Asp	Asp	Phe

		115					120					125			
Lys	Asp	Tyr	Thr	Leu	Leu	Tyr	Glu	Glu	Ala	Lys	Tyr	Phe	Gln	Leu	Gln
	130					135					140				
Pro	Met	Leu	Leu	Glu	Met	Glu	Arg	Trp	Lys	Gln	Asp	Arg	Glu	Thr	Gly
145					150					155					160
Arg	Phe	Ser	Arg	Pro	Cys	Glu	Cys	Leu	Val	Val	Arg	Val	Ala	Pro	Asp
				165					170					175	
Leu	Gly	Glu	Arg	Ile	Thr	Leu	Ser	Gly	Asp	Lys	Ser	Leu	Ile	Glu	Glu
			180					185					190		
Val	Phe	Pro	Glu	Ile	Gly	Asp	Val	Met	Cys	Asn	Ser	Val	Asn	Ala	Gly
		195				200					205				
Trp	Asn	His	Asp	Ser	Thr	His	Val	Ile	Arg	Phe	Pro	Leu	Asn	Gly	Tyr
	210					215					220				
Cys	His	Leu	Asn	Ser	Val	Gln	Val	Leu	Glu	Arg	Leu	Gln	Gln	Arg	Gly
225				230						235					240
Phe	Glu	Ile	Val	Gly	Ser	Cys	Gly	Gly	Gly	Val	Asp	Ser	Ser	Gln	Phe
				245					250					255	
Ser	Glu	Tyr	Val	Leu	Arg	Arg	Glu	Leu	Arg	Arg	Thr	Pro	Arg	Val	Pro
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Ser	Val	Ile	Arg	Ile	Lys	Gln	Glu	Pro	Leu	Asp					
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<210> 3133
<211> 621
<212> DNA
<213> Homo sapiens
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<210> 3134
<211> 51
<212> PRT
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<213> Homo sapiens

<400> 3134

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Ala	Val	Arg	Gln	Val	Pro	Ser	Ser	Cys	Ala	Ala	Ser	Arg	Lys	Asn	Glu
		20						25					30		
Thr	Glu	Val	Lys	Ser	Glu	Glu	Gly	Pro	Gly	Trp	Thr	Ile	Leu	Arg	Asp
		35					40					45			
Asp	Phe	Met													
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<210> 3135

<211> 3166

<212> DNA

<213> Homo sapiens

<400> 3135

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1080

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<211> 503

<212> DNA

<213> Homo sapiens

<400> 3139

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360

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503

<210> 3140

<211> 115

<212> PRT

<213> Homo sapiens

<400> 3140

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1

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10

15

Arg Gln Leu Thr Trp Pro Glu Gly Lys Val Leu Trp Tyr Asn Thr Val

20

25

30

Leu Asn Lys Ser Ser Asn Trp Gly Thr Ser Pro Leu Leu Trp Tyr Phe

35

40

45

Tyr Ser Ala Leu Pro Arg Gly Leu Gly Cys Ser Leu Leu Phe Ile Pro

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<212> DNA
<213> Homo sapiens
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1080
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1200

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<210> 3142

<211> 451

<212> PRT

<213> Homo sapiens

<400> 3142

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			20					25					30		
Pro	Glu	Gly	Ile	Val	Glu	Glu	Phe	Ala	Thr	Glu	Gly	Thr	Asp	Arg	Lys
			35				40					45			
Asp	Val	Phe	Phe	Tyr	Gln	Ala	Asp	Asp	Glu	His	Tyr	Ile	Pro	Arg	Ala
	50					55					60				
Val	Leu	Leu	Asp	Leu	Glu	Pro	Arg	Val	Ile	His	Ser	Ile	Leu	Asn	Ser
65					70				75					80	
Pro	Tyr	Ala	Lys	Leu	Tyr	Asn	Pro	Glu	Asn	Ile	Tyr	Leu	Ser	Glu	His
				85					90					95	
Gly	Gly	Gly	Ala	Gly	Asn	Asn	Trp	Ala	Ser	Gly	Phe	Ser	Gln	Gly	Glu
			100					105					110		
Lys	Ile	His	Glu	Asp	Ile	Phe	Asp	Ile	Ile	Asp	Arg	Glu	Ala	Asp	Gly
		115				120					125				
Ser	Asp	Ser	Leu	Glu	Gly	Phe	Val	Leu	Cys	His	Ser	Ile	Ala	Gly	Gly
	130					135					140				
Thr	Gly	Ser	Gly	Leu	Gly	Ser	Tyr	Leu	Leu	Glu	Arg	Leu	Asn	Asp	Arg
145				150						155				160	
Tyr	Pro	Lys	Lys	Leu	Val	Gln	Thr	Tyr	Ser	Val	Phe	Pro	Asn	Gln	Asp
				165					170					175	
Glu	Met	Ser	Asp	Val	Val	Val	Gln	Pro	Tyr	Asn	Ser	Leu	Leu	Thr	Leu
			180					185					190		
Lys	Arg	Leu	Thr	Gln	Asn	Ala	Asp	Cys	Val	Val	Val	Leu	Asp	Asn	Thr

195	200	205
Ala Leu Asn Arg Ile Ala Thr Asp Arg Leu His Ile Gln Asn Pro Ser		
210	215	220
Phe Ser Gln Ile Asn Gln Leu Val Ser Thr Ile Met Ser Ala Ser Thr		
225	230	235
Thr Thr Leu Arg Tyr Pro Gly Tyr Met Asn Asn Asp Leu Ile Gly Leu		
245	250	255
Ile Ala Ser Leu Ile Pro Thr Pro Arg Leu His Phe Leu Met Thr Gly		
260	265	270
Tyr Thr Pro Leu Thr Thr Asp Gln Ser Val Ala Ser Val Arg Lys Thr		
275	280	285
Thr Val Leu Asp Val Met Arg Arg Leu Leu Gln Pro Lys Asn Val Met		
290	295	300
Val Ser Thr Gly Arg Asp Arg Gln Thr Asn His Cys Tyr Ile Ala Ile		
305	310	315
Leu Asn Ile Ile Gln Gly Glu Val Asp Pro Thr Gln Val His Lys Ser		
325	330	335
Leu Gln Arg Ile Arg Glu Arg Lys Leu Ala Asn Phe Ile Pro Trp Gly		
340	345	350
Pro Ala Ser Ile Gln Val Ala Leu Ser Arg Lys Ser Pro Tyr Leu Pro		
355	360	365
Ser Ala His Arg Val Ser Gly Leu Met Met Ala Asn His Thr Ser Ile		
370	375	380
Ser Ser Leu Phe Glu Arg Thr Cys Arg Gln Tyr Asp Lys Leu Arg Lys		
385	390	395
Arg Glu Ala Phe Leu Glu Gln Phe Arg Lys Glu Asp Met Phe Lys Asp		
405	410	415
Asn Phe Asp Glu Met Asp Thr Ser Arg Glu Ile Val Gln Gln Leu Ile		
420	425	430
Asp Glu Tyr His Ala Ala Thr Arg Pro Asp Tyr Ile Ser Trp Gly Thr		
435	440	445
Gln Glu Gln		
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<210> 3143

<211> 356

<212> DNA

<213> Homo sapiens

<400> 3143

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180

tcacggttaa ccaagccatc ccccatgctg ggcgtgaggc actagcggaa ttgagagcct
240

cagaaacca ggtgctgctg tgtgaggctg tcgcagccac gaagatgacc atgactgcaa
300

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356

<210> 3144

<211> 81
 <212> PRT
 <213> Homo sapiens

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 Ala Trp Leu Thr Val Lys His Pro His Thr Val Asp Gln Gln Pro Pro
 35 40 45
 Leu Pro Thr Ser Gln Glu Leu Arg Pro Ala Ala Gln Pro Lys Gln Gln
 50 55 60
 Pro His His Ser Gln Thr Pro Pro Gln Arg Val Cys Leu Arg Ala Pro
 65 70 75 80
 Ser

<210> 3145
 <211> 436
 <212> DNA
 <213> Homo sapiens

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<210> 3146
 <211> 131
 <212> PRT
 <213> Homo sapiens

<400> 3146
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 Thr Pro Arg Ser Pro Leu His Leu Pro Ser Gly Gly Cys Leu Lys Arg
 35 40 45
 Arg Leu Pro Pro Phe Thr His Leu Pro Ser Val Pro Gly Pro Pro Ser

50		55		60
Leu Val Cys Gln Thr	Leu Gln Pro Pro Ala Ser	Gly His Ser Ala Arg		
65	70	75	80	
Gln Met Thr Ser Gly	Gly Glu Pro His Ile Ser	Thr Gly Ser Arg Arg		
	85	90	95	
Pro Arg Lys Leu Pro	Trp Pro Ala His Pro Arg	Cys Ser Ala Cys Pro		
	100	105	110	
Pro Asn Val Val Ser	Ser Arg Arg Leu Thr	Pro Arg Arg Gly Trp		
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<210> 3147

<211> 3106

<212> DNA

<213> Homo sapiens

<400> 3147

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<210> 3148

<211> 444

<212> PRT

<213> Homo sapiens

<400> 3148

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			20				25					30			
Thr	Asp	Arg	Trp	Leu	Val	Ile	Asp	Arg	Lys	Val	Tyr	Asn	Ile	Thr	Lys
		35				40					45				
Trp	Ser	Ile	Gln	His	Pro	Gly	Gly	Gln	Arg	Val	Ile	Gly	His	Tyr	Ala
	50				55					60					
Gly	Glu	Asp	Ala	Thr	Asp	Ala	Phe	Arg	Ala	Phe	His	Pro	Asp	Leu	Glu
65				70					75					80	
Phe	Val	Gly	Lys	Phe	Leu	Lys	Pro	Leu	Leu	Ile	Gly	Glu	Leu	Ala	Pro
			85					90						95	
Glu	Glu	Pro	Ser	Gln	Asp	His	Gly	Lys	Asn	Ser	Lys	Ile	Thr	Glu	Asp
		100					105					110			
Phe	Arg	Ala	Leu	Arg	Lys	Thr	Ala	Glu	Asp	Met	Asn	Leu	Phe	Lys	Thr
		115				120						125			
Asn	His	Val	Phe	Phe	Leu	Leu	Leu	Leu	Ala	His	Ile	Ile	Ala	Leu	Glu
	130				135						140				
Ser	Ile	Ala	Trp	Phe	Thr	Val	Phe	Tyr	Phe	Gly	Asn	Gly	Trp	Ile	Pro
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			165					170						175	
Trp	Leu	Gln	His	Asp	Tyr	Gly	His	Leu	Ser	Val	Tyr	Arg	Lys	Pro	Lys
		180					185					190			
Trp	Asn	His	Leu	Val	His	Lys	Phe	Val	Ile	Gly	His	Leu	Lys	Gly	Ala
	195					200						205			
Ser	Ala	Asn	Trp	Trp	Asn	His	Arg	His	Phe	Gln	His	His	Ala	Lys	Pro
	210				215					220					
Asn	Ile	Phe	His	Lys	Asp	Pro	Asp	Val	Asn	Met	Leu	His	Val	Phe	Val
225				230					235					240	
Leu	Gly	Glu	Trp	Gln	Pro	Ile	Glu	Tyr	Gly	Lys	Lys	Lys	Leu	Lys	Tyr
			245					250					255		
Leu	Pro	Tyr	Asn	His	Gln	His	Glu	Tyr	Phe	Phe	Leu	Ile	Gly	Pro	Pro

260 265 270
 Leu Leu Ile Pro Met Tyr Phe Gln Tyr Gln Ile Ile Met Thr Met Ile
 275 280 285
 Val His Lys Asn Trp Val Asp Leu Ala Trp Ala Val Ser Tyr Tyr Ile
 290 295 300
 Arg Phe Phe Ile Thr Tyr Ile Pro Phe Tyr Gly Ile Leu Gly Ala Leu
 305 310 315 320
 Leu Phe Leu Asn Phe Ile Arg Phe Leu Glu Ser His Trp Phe Val Trp
 325 330 335
 Val Thr Gln Met Asn His Ile Val Met Glu Ile Asp Gln Glu Ala Tyr
 340 345 350
 Arg Asp Trp Phe Ser Ser Gln Leu Thr Ala Thr Cys Asn Val Glu Gln
 355 360 365
 Ser Phe Phe Asn Asp Trp Phe Ser Gly His Leu Asn Phe Gln Ile Glu
 370 375 380
 His His Leu Phe Pro Thr Met Pro Arg His Asn Leu His Lys Ile Ala
 385 390 395 400
 Pro Leu Val Lys Ser Leu Cys Ala Lys His Gly Ile Glu Tyr Gln Glu
 405 410 415
 Lys Pro Leu Leu Arg Ala Leu Leu Asp Ile Ile Arg Ser Leu Lys Lys
 420 425 430
 Ser Gly Lys Leu Trp Leu Asp Ala Tyr Leu His Lys
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<210> 3149

<211> 1006

<212> DNA

<213> Homo sapiens

<400> 3149

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 120
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 gatcagatcg agcagctcca tcggagattt aagcagctga gtggagatca gcttaccatt
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<210> 3150

<211> 201

<212> PRT

<213> Homo sapiens

<400> 3150

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			20					25					30		
Ala	Pro	Ala	Ala	Gly	Thr	Met	Gly	Ala	Ala	His	Ser	Ala	Ser	Glu	Glu
			35				40					45			
Val	Arg	Glu	Leu	Glu	Gly	Lys	Thr	Gly	Phe	Ser	Ser	Asp	Gln	Ile	Glu
	50					55					60				
Gln	Leu	His	Arg	Arg	Phe	Lys	Gln	Leu	Ser	Gly	Asp	Gln	Pro	Thr	Ile
65					70					75				80	
Arg	Lys	Glu	Asn	Phe	Asn	Asn	Val	Pro	Asp	Leu	Glu	Leu	Asn	Pro	Ile
			85						90					95	
Arg	Ser	Lys	Ile	Val	Arg	Ala	Phe	Phe	Asp	Asn	Arg	Asn	Leu	Arg	Lys
			100					105					110		
Gly	Pro	Ser	Gly	Leu	Ala	Asp	Glu	Ile	Asn	Phe	Glu	Asp	Phe	Leu	Thr
			115				120					125			
Ile	Met	Ser	Tyr	Phe	Arg	Pro	Ile	Asp	Thr	Thr	Met	Asp	Glu	Glu	Gln
	130					135					140				
Val	Glu	Leu	Ser	Arg	Lys	Glu	Lys	Leu	Arg	Phe	Leu	Phe	His	Met	Tyr
145					150					155				160	
Asp	Ser	Asp	Ser	Asp	Gly	Arg	Ile	Thr	Leu	Glu	Glu	Tyr	Arg	Asn	Val
			165					170					175		
Lys	Trp	Ser	Arg	Ser	Cys	Cys	Arg	Glu	Thr	Leu	Thr	Ser	Arg	Arg	Ser
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Pro	Leu	Ala	Pro	Ser	Pro	Thr	Gly	Pro							
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<210> 3151

<211> 2079

<212> DNA

<213> Homo sapiens

<400> 3151

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 120

cctgggcctc tcggtggagc agggacccga accggtgcc atccagtcgc gtgccatctg
180
aagccccctt cccagaaaat gagccacaga gcaagctgac cccagcgaca cagcccccca
240
gccctactat atttccgttc ctatcaaaaa atggatgact cggagacagg ttccaatctg
300
aaagtcgtcc tggtcagttt caagcagtgt ctcgatgaga aggaagaggt cttgctggac
360
ccctacattg ccagctggaa gggcctggtc aggtttctga acagcctggg caccatcttc
420
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480
ccgcagagcg agcactaccg cagcctgcag gccatgggtg cccacgagct gagcaaccgg
540
ctgggtggacc tggagggccg ctcccaccac ccggagtctg gctgccggac ggtgctgcgc
600
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660
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720
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1140
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1200
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1320
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1380
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1440
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1680
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1740

tcccttctcc cccgtgcccc ttgatgcccc ctccccacag tgctcaggag acccgtgggg
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 1860
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 1920
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 1980
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 2040
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 2079

<210> 3152
 <211> 214
 <212> PRT
 <213> Homo sapiens

<400> 3152
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 Phe Lys Gln Cys Leu Asp Glu Lys Glu Glu Val Leu Leu Asp Pro Tyr
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 Ile Ala Ser Trp Lys Gly Leu Val Arg Phe Leu Asn Ser Leu Gly Thr
 35 40 45
 Ile Phe Ser Phe Ile Ser Lys Asp Val Val Ser Lys Leu Arg Ile Met
 50 55 60
 Glu Arg Leu Arg Gly Gly Pro Gln Ser Glu His Tyr Arg Ser Leu Gln
 65 70 75 80
 Ala Met Val Ala His Glu Leu Ser Asn Arg Leu Val Asp Leu Glu Gly
 85 90 95
 Arg Ser His His Pro Glu Ser Gly Cys Arg Thr Val Leu Arg Leu His
 100 105 110
 Arg Ala Leu His Trp Leu Gln Leu Phe Leu Glu Gly Leu Arg Thr Ser
 115 120 125
 Pro Glu Asp Ala Arg Thr Ser Ala Leu Cys Ala Asp Ser Tyr Asn Ala
 130 135 140
 Ser Leu Ala Ala Tyr His Pro Trp Val Val Arg Arg Ala Val Thr Val
 145 150 155 160
 Ala Phe Cys Thr Leu Pro Thr Arg Glu Val Phe Leu Glu Ala Met Asn
 165 170 175
 Val Gly Pro Pro Glu Gln Ala Val Gln Met Leu Gly Glu Ala Leu Pro
 180 185 190
 Phe Ile Gln Arg Val Tyr Asn Val Ser Gln Lys Leu Tyr Ala Glu His
 195 200 205
 Ser Leu Leu Asp Leu Pro
 210

<210> 3153
 <211> 1498
 <212> DNA
 <213> Homo sapiens

<400> 3153

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cccactcagc aaccaacaag gaggaagcc cccgcagtgc tcggccagtg ccgcgccatc
180
gccaccaggg agcgccccgc gcgcgggtcca cgtggcagag gtcgcggcct cgcggcgcgg
240
ggaggagccg cacgccacag tggcaggtcc caggccgtca ctccgagctc tcgccttcgg
300
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360
agggtgcag cagcctccgc ttcagcacag cagccactgt gtcctggctg tccgctgtgg
420
gccccagta gatgctctcc ccgcgtcggg agtttctgtg cagccgtgtg cagagcggtg
480
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540
tgcggtgggt ggggccccgg gctgcccgtg gagcgctgct gcgcgagggg ccggggaagc
600
ctgacttgaa cagacacagc cccctgggct gccttgcccg ttgggcacct gagcctctgt
660
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720
ggcattactc tccctaccag ggattcccgc catggactgc ttggccttca agctccctgg
780
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840
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900
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960
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1200
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1380
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<210> 3154

<211> 65

<212> PRT

<213> Homo sapiens

<400> 3154

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          20           25           30
Ser Gly His Arg Trp Gly Ile Thr Leu Pro Thr Arg Asp Ser Arg His
          35           40           45
Gly Leu Leu Gly Leu Gln Ala Pro Trp Gly Ser Arg Gly Lys Pro Gln
 50           55           60
Gly
65

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<210> 3155

<211> 551

<212> DNA

<213> Homo sapiens

<400> 3155

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120
actaactgtg actcttcttc agaaggactg gaaaaggaca cagcaacaca gagaagtgc
180
cagacttgcc tagaaccatc atgttcatgt tcttctgaaa atcaggaatg ccagactgct
240
gccagccctg gggaaattct ggaaattttg aagaaagggg aggcatattgt tttagatatt
300
gacttggatt ttttttcagt caagaatccc ttcaaaaaaa tgttcactca ggaagagtac
360
aaaatcttac aagagctgta ccaatttaag aaacctggca ccaacctaac agaggaagat
420
ttggtagata ttgttgatac tcgaattcat caattagagg atttagaagc cactttcgct
480
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gaatcactag t
551

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<210> 3156

<211> 178

<212> PRT

<213> Homo sapiens

<400> 3156

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Met Val Lys Pro Tyr Lys Leu Cys Asn Asn Gln Glu Glu Asn Asp Ala
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Val Ser Ser Ala Lys Lys Pro Lys Leu Ala Leu Glu Asp Ser Glu Asn
          20           25           30
Thr Ala Ser Thr Asn Cys Asp Ser Ser Ser Glu Gly Leu Glu Lys Asp
          35           40           45
Thr Ala Thr Gln Arg Ser Asp Gln Thr Cys Leu Glu Pro Ser Cys Ser

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50		55		60
Cys Ser Ser Glu Asn Gln Glu Cys Gln Thr Ala Ala Ser Pro Gly Glu				
65		70		75
Ile Leu Glu Ile Leu Lys Lys Gly Lys Ala Phe Val Leu Asp Ile Asp				80
	85		90	
Leu Asp Phe Phe Ser Val Lys Asn Pro Phe Lys Lys Met Phe Thr Gln				95
	100		105	110
Glu Glu Tyr Lys Ile Leu Gln Glu Leu Tyr Gln Phe Lys Lys Pro Gly				
	115		120	125
Thr Asn Leu Thr Glu Glu Asp Leu Val Asp Ile Val Asp Thr Arg Ile				
	130		135	140
His Gln Leu Glu Asp Leu Glu Ala Thr Phe Ala Asp Leu Cys Asp Gly				
145		150		155
Asp Asp Glu Glu Thr Val Gln Gly Trp Ala Ser Asn Pro Gly Met Glu				160
	165		170	175
Ser Leu				

<210> 3157

<211> 903

<212> DNA

<213> Homo sapiens

<400> 3157

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120
tctctggtag gacttctgat ggtgggggca cctccccagg tcacagtcca ggtgcagggc
180
caggaggtcc tatcagagaa gatggagccc tccagtttcc agcccctacc tgaaactgag
240
cctccaactc cagagcctgg gcccaagaca cctcctagga ctatgcagga atcaccactg
300
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420
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480
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720
gaacaggacc ccacggacga ggatccctgc cgggggtgtg gccctgctct ggtcaccacc
780
cgctggcgct cccccagggg ccggagccgg ggccgcccc gactggggg cgggggtggtt
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900

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cac
903

<210> 3158
<211> 92
<212> PRT
<213> Homo sapiens

<400> 3158
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Val Leu Ser Glu Lys Met Glu Pro Ser Ser Phe Gln Pro Leu Pro Glu
20 25 30
Thr Glu Pro Pro Thr Pro Glu Pro Gly Pro Lys Thr Pro Pro Arg Thr
35 40 45
Met Gln Glu Ser Pro Leu Gly Leu Gln Val Lys Glu Glu Ser Glu Val
50 55 60
Thr Glu Asp Ser Asp Phe Leu Glu Ser Gly Pro Leu Ala Ala Thr Gln
65 70 75 80
Glu Ser Val Pro Thr Leu Leu Pro Glu Glu Ala Gln
85 90

<210> 3159
<211> 2408
<212> DNA
<213> Homo sapiens

<400> 3159
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120
ccctggcaga ctaacgaagc agctcccttc ccaccccaac tgcaggtcta attttggacg
180
ctttgcctgc catttcttcc aggttgaggg agccgcagag gcggaggctc gcgtattcct
240
gcagtcagca cccacgtcgc ccccggaagc tcggtgctca ggcccttcgc gagcggggct
300
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360
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420
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480
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540
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600
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660
cataataaat tacgaagtca ggtgtatcca acagcctcta atatggagta tatgacatgg
720
gatgtagagc tggaaagatc tgcagaatcc tgggctgaaa gttgcttctg ggaacatgga
780

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900
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1020
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2100
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2160
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2220
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2280
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2400

tgccatta
2408

<210> 3160
<211> 431
<212> PRT
<213> Homo sapiens

<400> 3160
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20 25 30
Glu Lys Leu Leu Glu Lys Tyr Met Asp Glu Asp Gly Glu Trp Trp Ile
35 40 45
Ala Lys Gln Arg Gly Lys Arg Ala Ile Thr Asp Asn Asp Met Gln Ser
50 55 60
Ile Leu Asp Leu His Asn Lys Leu Arg Ser Gln Val Tyr Pro Thr Ala
65 70 75 80
Ser Asn Met Glu Tyr Met Thr Trp Asp Val Glu Leu Glu Arg Ser Ala
85 90 95
Glu Ser Trp Ala Glu Ser Cys Leu Trp Glu His Gly Pro Ala Ser Leu
100 105 110
Leu Pro Ser Ile Gly Gln Asn Leu Gly Ala His Trp Gly Arg Tyr Arg
115 120 125
Pro Pro Thr Phe His Val Gln Ser Trp Tyr Asp Glu Val Lys Asp Phe
130 135 140
Ser Tyr Pro Tyr Glu His Glu Cys Asn Pro Tyr Cys Pro Phe Arg Cys
145 150 155 160
Ser Gly Pro Val Cys Thr His Tyr Thr Gln Val Val Trp Ala Thr Ser
165 170 175
Asn Arg Ile Gly Cys Ala Ile Asn Leu Cys His Asn Met Asn Ile Trp
180 185 190
Gly Gln Ile Trp Pro Lys Ala Val Tyr Leu Val Cys Asn Tyr Ser Pro
195 200 205
Lys Gly Asn Trp Trp Gly His Ala Pro Tyr Lys His Gly Arg Pro Cys
210 215 220
Ser Ala Cys Pro Pro Ser Phe Gly Gly Gly Cys Arg Glu Asn Leu Cys
225 230 235 240
Tyr Lys Glu Gly Ser Asp Arg Tyr Tyr Pro Pro Arg Glu Glu Glu Thr
245 250 255
Asn Glu Ile Glu Arg Gln Gln Ser Gln Val His Asp Thr His Val Arg
260 265 270
Thr Arg Ser Asp Asp Ser Ser Arg Asn Glu Val Ile Ser Ala Gln Gln
275 280 285
Met Ser Gln Ile Val Ser Cys Glu Val Arg Leu Arg Asp Gln Cys Lys
290 295 300
Gly Thr Thr Cys Asn Arg Tyr Glu Cys Pro Ala Gly Cys Leu Asp Ser
305 310 315 320
Lys Ala Lys Val Ile Gly Ser Val His Tyr Glu Met Gln Ser Ser Ile
325 330 335
Cys Arg Ala Ala Ile His Tyr Gly Ile Ile Asp Asn Asp Gly Gly Trp
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Val Asp Ile Thr Arg Gln Gly Arg Lys His Tyr Phe Ile Lys Ser Asn

<400>	3162														
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Gln	Asn	Asn	Gly	Phe	Ser	Val	Asn	Ile	Asn	Arg	Asn	Lys	Thr	Gly	Glu
			20					25					30		
Ile	Thr	Ala	Ser	Ser	Asn	Lys	Ser	Leu	Asn	Leu	Leu	Lys	Ile	Lys	His
		35					40					45			
Gly	Asp	Leu	Leu	Phe	Leu	Phe	Pro	Ser	Ser	Leu	Ala	Gly	Pro	Ser	Ser
	50					55					60				
Glu	Met	Glu	Thr	Ser	Val	Pro	Pro	Gly	Phe	Lys	Val	Phe	Gly	Ala	Pro
65					70					75					80
Asn	Val	Val	Glu	Asp	Glu	Ile	Asp	Gln	Tyr	Leu	Ser	Lys	Gln	Asp	Gly
				85					90					95	
Lys	Ile	Tyr	Arg	Ser	Arg	Asp	Pro	Gln	Leu	Cys	Arg	His	Gly	Pro	Leu
			100					105					110		
Gly	Lys	Cys	Val	His	Cys	Val	Pro	Leu	Glu	Pro	Phe	Asp	Glu	Asp	Tyr
		115					120					125			
Leu	Asn	His	Leu	Glu	Pro	Pro	Val	Lys	His	Met	Ser	Phe	His	Ala	Tyr
		130				135					140				
Ile	Arg	Lys	Leu	Thr	Gly	Gly	Ala	Asp	Lys	Gly	Lys	Phe	Val	Ala	Leu
145					150					155					160
Glu	Asn	Ile	Ser	Cys	Lys	Ile	Lys	Ser	Gly	Cys	Glu	Gly	His	Leu	Pro
				165					170					175	
Trp	Pro	Asn	Gly	Ile	Cys	Thr	Lys	Cys	Gln	Pro	Ser	Ala	Ile	Thr	Leu
			180					185					190		
Asn	Arg	Gln	Lys	Tyr	Arg	His	Val	Asp	Asn	Ile	Met	Phe	Glu	Asn	His
		195					200					205			
Thr	Val	Ala	Asp	Arg	Phe	Leu	Asp	Phe	Trp	Arg	Lys	Thr	Gly	Asn	Gln
		210				215					220				
His	Phe	Gly	Tyr	Leu	Tyr	Gly	Arg	Tyr	Thr	Glu	His	Lys	Asp	Ile	Pro
225					230					235					240
Leu	Gly	Ile	Arg	Ala	Glu	Val	Ala	Ala	Ile	Tyr	Glu	Pro	Pro	Gln	Ile
				245					250					255	
Gly	Thr	Gln	Asn	Ser	Leu	Glu	Leu	Leu	Glu	Asp	Pro	Lys	Ala	Glu	Val
			260					265					270		
Val	Asp	Glu	Ile	Ala	Ala	Lys	Leu	Gly	Leu	Arg	Lys	Val	Gly	Trp	Ile
		275					280					285			
Phe	Thr	Asp	Leu	Val	Ser	Glu	Asp	Thr	Arg	Lys	Gly	Thr	Val	Arg	Tyr
		290				295					300				
Ser	Arg	Asn	Lys	Asp	Thr	Tyr	Phe	Leu	Ser	Ser	Glu	Glu	Cys	Ile	Thr
305					310						315				320
Ala	Gly	Asp	Phe	Gln	Asn	Lys	His	Pro	Asn	Met	Cys	Arg	Leu	Ser	Pro
				325					330					335	
Asp	Gly	His	Phe	Gly	Ser	Lys	Phe	Val	Thr	Ala	Val	Ala	Thr	Gly	Gly
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<211> 1075
<212> DNA
<213> Homo sapiens
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<210> 3164
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<212> PRT
<213> Homo sapiens
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<400> 3164

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 35           40           45
Ser Ser Ala Ala Xaa Ala Ser Ala Ser Thr Gly Pro Trp His Ser Gly
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Cys Gly Ser Ser Cys Gly Ser Cys Cys Cys Trp Gly Ser Pro Ser Ala
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<210> 3165

<211> 2413

<212> DNA

<213> Homo sapiens

<400> 3165

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1020

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<211> 717

<212> PRT

<213> Homo sapiens

<400> 3166

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Ala Glu Trp Asp Gln Val Thr Val Tyr Leu Phe Cys Asp Asp His Lys
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Leu Gln Arg Tyr Ala Leu Asn Arg Ile Thr Val Trp Arg Ser Arg Ser
 65          70          75          80
Gly Asn Glu Leu Pro Leu Ala Val Ala Ser Thr Ala Asp Leu Ile Arg
 85          90          95
Cys Lys Leu Leu Asp Val Thr Gly Gly Leu Gly Thr Asp Glu Leu Arg
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Arg Lys Thr Lys Phe Ala Lys Val Pro Leu Lys Cys Leu Ala Gln Glu
 130         135         140
Val Asn Ile Pro Asp Trp Ile Val Asp Leu Arg His Glu Leu Thr His
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Lys Lys Met Pro His Ile Asn Asp Cys Arg Arg Gly Cys Tyr Phe Val
 165         170         175
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Lys Lys Ala Leu Ser His Lys Glu Leu Tyr Glu Arg Ala Arg Glu Leu
 260         265         270
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 370         375         380
Met Leu Ser Glu Leu Pro Ala Leu Gly Ile Ser Gly Ile Arg Pro Thr
 385         390         395         400
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 405         410         415
Gly Arg Asn Ala Arg Arg Phe Ser Ala Gly Gln Trp Glu Ala Arg Arg

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Ser Leu Val	Gln Glu Gly Ser Glu	Ala Ser Pro Ile	Gly Lys Ser Pro		
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Tyr Thr Leu	Asp Ser Leu Tyr Trp	Ser Val Lys Pro	Ala Ser Ser Ser		
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Phe Gly Ser	Glu Ala Lys Ala Gln	Gln Gln Glu Glu	Gln Gly Ser Val		
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Pro Phe Ser	Thr Gly Gln Glu Ser	Pro Thr Ala Glu	Asn Ala Arg Leu		
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Gln Thr Glu	Asp Pro Ala Glu Leu	Met Leu Glu Asn	Tyr Asp Thr Met		
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Tyr Leu Leu	Asp Gln Pro Val Leu	Glu Gln Arg Leu	Glu Pro Ser Thr		
	660		665		670
Cys Lys Thr	Asp Thr Leu Gly Leu	Ser Cys Gly Val	Gly Ser Gly Asn		
	675		680		685
Cys Ser Asn	Ser Ser Ser Asn Phe	Glu Gly Leu Leu	Trp Ser Gln		
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<211> 2730

<212> DNA

<213> Homo sapiens

<400> 3167

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<211> 312

<212> PRT

<213> Homo sapiens

<400> 3168

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<211> 5945

<212> DNA

<213> Homo sapiens

<400> 3169

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 <211> 412
 <212> PRT
 <213> Homo sapiens

<400> 3170
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 35 40 45
 Pro Glu Gln Gln Met Ile Ala Asp Ile His Cys Met Ile Ala Ala Gly
 50 55 60
 Gln Asp Leu Asp Trp Ile Asp Ala Gln Gly Ala Thr Leu Leu His Ile
 65 70 75 80
 Ala Gly Ala Asn Gly Tyr Leu Arg Ala Ala Glu Leu Leu Leu Asp His
 85 90 95
 Gly Val Arg Val Asp Val Lys Asp Trp Asp Gly Trp Glu Pro Leu His
 100 105 110
 Ala Ala Ala Phe Trp Gly Gln Met Gln Met Ala Glu Leu Leu Val Ser
 115 120 125
 His Gly Ala Ser Leu Ser Ala Arg Thr Ser Met Asp Glu Met Pro Ile
 130 135 140
 Asp Leu Cys Glu Glu Glu Glu Phe Lys Val Leu Leu Leu Glu Leu Lys
 145 150 155 160
 His Lys His Asp Val Ile Met Lys Ser Gln Leu Arg His Lys Ser Ser
 165 170 175
 Leu Ser Arg Arg Thr Ser Ser Ala Gly Ser Arg Gly Lys Val Val Arg
 180 185 190
 Arg Ala Ser Leu Ser Asp Arg Thr Asn Leu Tyr Arg Lys Glu Tyr Glu
 195 200 205
 Gly Glu Ala Ile Leu Trp Gln Arg Ser Ala Ala Glu Asp Gln Arg Thr
 210 215 220
 Ser Thr Tyr Asn Gly Asp Ile Arg Glu Thr Arg Thr Asp Gln Glu Asn
 225 230 235 240
 Lys Asp Pro Asn Pro Arg Leu Glu Lys Pro Val Leu Leu Ser Glu Phe
 245 250 255
 Pro Thr Lys Ile Pro Arg Gly Glu Leu Asp Met Pro Val Glu Asn Gly
 260 265 270
 Leu Arg Ala Pro Val Ser Ala Tyr Gln Tyr Ala Leu Ala Asn Gly Asp

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Val	Trp	Lys	Val	His	Glu	Val	Pro	Asp	Tyr	Ser	Met	Ala	Tyr	Gly	Asn				
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Ser	Pro	Gln	Thr	Leu	Leu	Glu	Leu	Lys	Arg	Gln	Arg	Ala	Ala	Ala	Lys				
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Leu	Leu	Ser	His	Pro	Phe	Leu	Ser	Thr	His	Leu	Gly	Ser	Ser	Met	Ala				
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Arg	Thr	Gly	Glu	Ser	Ser	Ser	Glu	Gly	Lys	Ala	Xaa	Leu	Ile	Gly	Gly				
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Arg	Thr	Ser	Pro	Tyr	Ser	Ser	Asn	Gly	Thr	Ser	Val	Tyr	Tyr	Thr	Val				
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Thr	Ser	Gly	Asp	Pro	Pro	Leu	Leu	Lys	Phe	Lys	Ala	Pro	Ile	Glu	Glu				
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<210> 3171

<211> 753

<212> DNA

<213> Homo sapiens

<400> 3171

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<210> 3172

<211> 228

<212> PRT

<213> Homo sapiens

<400> 3172

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Gly Thr Ser Asp Ala Glu Thr Ser Ala Leu His Ile Val Val Gly Asp
      35           40           45
Ser Leu Ala Met Asp Val Ser Ser Val His His Asn Ser Thr Leu Leu
      50           55           60
Arg Tyr Ser Val Ser Leu Leu Gly Tyr Gly Phe Tyr Gly Asp Ile Ile
      65           70           75           80
Lys Asp Ser Glu Lys Lys Arg Trp Leu Gly Leu Ala Arg Tyr Asp Phe
      85           90           95
Ser Gly Leu Lys Thr Phe Leu Ser His His Cys Tyr Glu Gly Thr Val
      100          105          110
Ser Phe Leu Pro Ala Gln His Thr Val Gly Ser Pro Arg Asp Arg Lys
      115          120          125
Pro Cys Arg Ala Gly Cys Phe Val Cys Arg Gln Ser Lys Gln Gln Leu
      130          135          140
Glu Glu Glu Gln Lys Lys Ala Leu Tyr Gly Leu Glu Ala Ala Glu Asp
      145          150          155          160
Val Glu Glu Trp Gln Val Val Cys Gly Lys Phe Leu Ala Ile Asn Ala
      165          170          175
Thr Asn Met Ser Cys Ala Cys Arg Arg Ser Pro Arg Gly Leu Ser Pro
      180          185          190
Ala Ala His Leu Gly Asp Gly Ser Ser Asp Leu Ile Leu Ile Arg Lys
      195          200          205
Cys Ser Arg Phe Asn Phe Leu Arg Phe Leu Ile Trp His Glu Val Cys
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Lys Lys Pro Leu
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<210> 3173

<211> 573

<212> DNA

<213> Homo sapiens

<400> 3173

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 420

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<210> 3174
 <211> 152
 <212> PRT
 <213> Homo sapiens

<400> 3174
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 Gln Thr Phe Pro Leu Gln Leu Glu Asn Gly Gln Thr Val Glu Arg Thr
 35 40 45
 Val Ala Gln Tyr Phe Arg Glu Lys Tyr Thr Leu Gln Leu Lys Tyr Pro
 50 55 60
 His Leu Pro Cys Leu Gln Val Gly Gln Glu Gln Lys His Thr Tyr Leu
 65 70 75 80
 Pro Leu Glu Val Cys Asn Ile Val Ala Gly Gln Arg Cys Ile Lys Lys
 85 90 95
 Leu Thr Asp Asn Gln Thr Ser Thr Met Ile Lys Ala Thr Ala Arg Ser
 100 105 110
 Ala Pro Asp Arg Gln Glu Glu Ile Ser Arg Leu Val Arg Ser Ala Asn
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 Tyr Glu Thr Asp Pro Phe Val Gln Glu Phe Gln Phe Lys Val Arg Asp
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 Glu Met Ala His Val Thr Gly Arg
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<210> 3175
 <211> 948
 <212> DNA
 <213> Homo sapiens

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 300
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<210> 3176

<211> 92

<212> PRT

<213> Homo sapiens

<400> 3176

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Ala	Leu	Leu	Gly	Gly	Arg	Trp	Leu	Gln	Pro	Arg	Ala	Trp	Leu	Gly	Phe
			20					25					30		
Pro	Asp	Ala	Trp	Gly	Leu	Pro	Thr	Pro	Gln	Gln	Ala	Arg	Gly	Lys	Ala
			35				40					45			
Arg	Gly	Asn	Glu	Tyr	Gln	Pro	Ser	Asn	Ile	Lys	Arg	Lys	Asn	Lys	His
		50				55					60				
Gly	Trp	Val	Arg	Arg	Leu	Ser	Thr	Pro	Ala	Gly	Val	Gln	Val	Ile	Leu
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Arg	Arg	Met	Leu	Lys	Gly	Arg	Lys	Ser	Leu	Ser	His				
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<210> 3177

<211> 1857

<212> DNA

<213> Homo sapiens

<400> 3177

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<210> 3178

<211> 273

<212> PRT

<213> Homo sapiens

<400> 3178

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Glu Gln Val Gln Phe Gln Pro Asn Thr Val Asn Thr Leu Ala Cys Pro
      35           40           45
Leu Leu Ser Asn Leu Ala Thr Arg Leu Trp Leu Arg Asn Gly Ala Pro
      50           55           60
Val Asn Ala Ser Ala Ser Cys His Val Leu Pro Thr Gly Asp Leu Leu
65           70           75           80
Leu Val Gly Thr Gln Gln Leu Gly Glu Phe Gln Cys Trp Ser Leu Glu
      85           90           95
Glu Gly Phe Gln Gln Leu Val Ala Ser Tyr Cys Pro Glu Val Val Glu
      100          105          110
Asp Gly Val Ala Asp Gln Thr Asp Glu Gly Gly Ser Val Pro Val Ile
      115          120          125
Ile Ser Thr Ser Arg Val Ser Ala Pro Ala Gly Gly Lys Ala Ser Trp
      130          135          140
Gly Ala Asp Arg Ser Tyr Trp Lys Glu Phe Leu Val Met Cys Thr Leu
145          150          155          160
Phe Val Leu Ala Val Leu Leu Pro Val Leu Phe Leu Leu Tyr Arg His
      165          170          175
Arg Asn Ser Met Lys Val Phe Leu Lys Gln Gly Glu Cys Ala Ser Val
      180          185          190
His Pro Lys Thr Cys Pro Val Val Leu Pro Pro Glu Thr Arg Pro Leu
      195          200          205
Asn Gly Leu Gly Pro Pro Ser Thr Pro Leu Asp His Arg Gly Tyr Gln
      210          215          220
Ser Leu Ser Asp Ser Pro Pro Gly Ala Arg Val Phe Thr Glu Ser Glu
225          230          235          240
Lys Arg Pro Leu Ser Ile Gln Asp Ser Phe Val Glu Val Ser Pro Val
      245          250          255
Cys Pro Arg Pro Arg Val Arg Leu Gly Ser Glu Ile Arg Asp Ser Val
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<210> 3179

<211> 3447

<212> DNA

<213> Homo sapiens

<400> 3179

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120
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180

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3300
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3420

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3447

<210> 3180
<211> 127
<212> PRT
<213> Homo sapiens

<400> 3180
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Thr Gln Thr Asp Gly Arg Asp Val Asn Ser Cys Leu Lys Leu Arg Cys
20 25 30
Ala Phe Thr Pro Thr Gly Lys Val Lys Leu Thr Phe Val Phe Leu Phe
35 40 45
Asn Asn Phe Met Ile Asn Lys Glu Leu Gln Leu Glu Thr Lys Ala Asn
50 55 60
Ser Arg Asn Ser Leu Thr Pro Ser Cys Pro Met Val Phe Met Ile Ala
65 70 75 80
Cys Tyr Gln Asn Glu Ala Leu Cys Ser Thr Leu Tyr Ser Lys Ala Phe
85 90 95
Tyr Ala Pro Thr Arg Pro Ser Gly Ile Pro Glu Ser Ala Leu His Thr
100 105 110
Gly Arg Lys Thr Ala Ser Ser Tyr Arg Leu Cys Glu Asn Thr Gln
115 120 125

<210> 3181
<211> 287
<212> DNA
<213> Homo sapiens

<400> 3181
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120
cctcaaggac ggctgggctt ctccctgcac tcgcagctcg ccaagttcct gttggaccgg
180
tacacttctt caggetgtgt cctctgtgca ggtcctgagc ttttgctcc aaaaggtctg
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cagtatctgg tgctcttgtc tcatgcccc caccggagat gcaccct
287

<210> 3182
<211> 95
<212> PRT
<213> Homo sapiens

<400> 3182
Met Ala Ser Ser Pro Ala Val Asp Val Ser Cys Arg Arg Arg Gly Glu
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20 25 30
Gly His Met Lys Gln Gly Gly Leu Leu Lys Asp Gly Trp Ala Ser Pro

35					40					45						
Cys	Thr	Arg	Ser	Ser	Pro	Ser	Ser	Cys	Trp	Thr	Gly	Thr	Leu	Leu	Gln	
50					55					60						
Ala	Val	Ser	Ser	Val	Gln	Val	Leu	Ser	Phe	Cys	Leu	Gln	Lys	Val	Cys	
65					70					75					80	
Ser	Ile	Trp	Cys	Ser	Cys	Leu	Met	Pro	His	Thr	Gly	Asp	Ala	Pro		
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<210> 3183
<211> 1457
<212> DNA
<213> Homo sapiens
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120					
aaagttctcc	ctgagagctg	caggctgtcc	tggaaatctcc	tcgggggatga	ggcagctgcc
180					
gagctggccc	aggtgctgcc	gcagatgggc	cggctgaaga	gagtggacct	ggagaagaat
240					
cagatcacag	ctttgggggc	ctggctcctg	gctgaaggac	tggcccaggg	gtctagcatc
300					
caagtcatcc	gcctctggaa	taaccccat	ccttgcgaca	tggcccagca	cctgaagagc
360					
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420					
tgatggcccc	ctcaagacct	ttggaatcca	gccaaagtgt	gcacccaaat	gatccacctt
480					
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540					
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660					
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720					
cagtgtgacc	ccttgacatg	tggcggtaca	tgaaagtcag	tgtggcacgt	gttctgtggc
780					
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840					
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900					
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960					
caggaaaagt	cttccgcccc	agctgggagg	ggagagtgtc	catgcactga	ccagtccagg
1020					
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1080					
tcaatcctca	gcctacccat	ctataaactt	gatgactcct	cccttactta	catactagct
1140					
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1200					

tgtaagggac aaagccaggt ctaatggtac tgggtagggg gcactgccaa gacaataagc
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 1320
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 1440
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 1457

<210> 3184
 <211> 140
 <212> PRT
 <213> Homo sapiens

<400> 3184
 Xaa Tyr Val Ser Cys Ile Val Met Thr Pro Ser Leu Cys Val Ala Cys
 1 5 10 15
 Pro Gln Leu Ile Thr His Ile Pro Arg Asn Ala Gly Tyr Ser Phe Val
 20 25 30
 Gln Thr Gln Leu Leu Val Pro Lys Lys Val Leu Pro Glu Ser Cys Arg
 35 40 45
 Leu Ser Trp Asn Leu Leu Gly Asp Glu Ala Ala Ala Glu Leu Ala Gln
 50 55 60
 Val Leu Pro Gln Met Gly Arg Leu Lys Arg Val Asp Leu Glu Lys Asn
 65 70 75 80
 Gln Ile Thr Ala Leu Gly Ala Trp Leu Leu Ala Glu Gly Leu Ala Gln
 85 90 95
 Gly Ser Ser Ile Gln Val Ile Arg Leu Trp Asn Asn Pro Ile Pro Cys
 100 105 110
 Asp Met Ala Gln His Leu Lys Ser Gln Glu Pro Arg Leu Asp Phe Ala
 115 120 125
 Phe Phe Asp Asn Gln Pro Gln Ala Pro Trp Gly Thr
 130 135 140

<210> 3185
 <211> 1433
 <212> DNA
 <213> Homo sapiens

<400> 3185
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 120
 cctggtaacc tgaggaggtg tagagcacc agaaggaagg gtaaaagcag ggggcaaagc
 180
 ggtggccctc cttttctggg ggtcacttct gggctggggc cagctgaaac ctgtgtccaa
 240
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 300
 ccatggggtc ccaccttcc cagccagtga ggtagcatg gtaggagtc cacatgtgtg
 360

caagtgcttg tgtggaggct catgtatgca tgtgtgtata tgcaaagctg cacatgacaa
 420
 tgtgcatgcc agtccagagt tagatgtacc tatgcagttg ccctcaagcg aagggtcata
 480
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 540
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 600
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 660
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 720
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 780
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 840
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 aagtccagca gcctgtatg cactcctct ggtttgtcca ggtaacaggg gtgccccgcc
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 1140
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 1320
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 1380
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<210> 3186

<211> 112

<212> PRT

<213> Homo sapiens

<400> 3186

Met	Pro	Leu	Leu	Trp	Phe	Val	Gln	Val	Thr	Gly	Val	Pro	Arg	Pro	Leu
1				5					10					15	
His	Asp	Gln	His	Pro	Val	Val	Gly	Gln	Leu	Leu	Gln	Val	Leu	Lys	Ala
			20					25					30		
Gly	Leu	Thr	His	Gly	Val	Leu	Val	Ser	Ile	Tyr	Asn	Gln	Ser	Trp	Ser
		35				40						45			
Leu	Arg	Gly	Arg	Ile	Gly	Gly	Trp	Gly	Arg	Val	Asn	Arg	Thr	Cys	His
	50					55				60					
Ser	Ile	Pro	Ser	Pro	Pro	His	Phe	Ser	Leu	Phe	Leu	Gly	Pro	Pro	His
65					70					75				80	
Met	Arg	Glu	Arg	Asp	Lys	Leu	Ala	Gln	Trp	Val	Gly	Ala	Gln	Ile	Gly

	85		90		95										
Val	Cys	Pro	Arg	Thr	Gln	Phe	Ser	Thr	Gly	Leu	Gly	Thr	Val	Val	Cys
	100							105					110		

<210> 3187
 <211> 860
 <212> DNA
 <213> Homo sapiens

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 aagtggctct cccgcctcgg cctcctgagt agctgggatt acagatatgt tcctaaaaca
 180
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 240
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 420
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 660
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 840
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 860

<210> 3188
 <211> 120
 <212> PRT
 <213> Homo sapiens

<400> 3188
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 Asp Tyr Arg Tyr Val Pro Lys Thr Ser Leu Ser Ser Pro Pro Trp Pro
 20 25 30
 Glu Val Val Leu Pro Asp Pro Val Glu Glu Thr Arg His His Ala Glu
 35 40 45
 Val Val Lys Lys Val Asn Glu Met Ile Val Thr Gly Gln Tyr Gly Arg

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      50              55              60
Leu Phe Ala Val Val His Phe Ala Ser Arg Gln Trp Lys Val Thr Ser
65              70              75              80
Glu Asp Leu Ile Leu Ile Gly Asn Glu Leu Asp Leu Ala Cys Gly Glu
      85              90              95
Arg Ile Arg Leu Glu Lys Val Leu Leu Val Gly Ala Asp Asn Phe Thr
      100              105              110
Leu Leu Gly Lys Pro Leu Leu Gly
      115              120

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<210> 3189

<211> 440

<212> DNA

<213> Homo sapiens

<400> 3189

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120
gactccccct ctgggccagt gctgccctgc tttctctgtc tctttcaggg tgtgctgtcc
180
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240
ggcatgggtga tgttcaccct ggggttcgcc ggctgcgtgg gggctctgcg ggagaatata
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tgcttgctca actttgtgag tggccacaga gacaagagtg ggatatgatg caatggggta
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440

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<210> 3190

<211> 111

<212> PRT

<213> Homo sapiens

<400> 3190

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Gly His Gly Trp Gly Arg Thr Leu Ala Trp Leu Ser Thr Arg Gly Leu
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Ser Leu Gly Lys Gln Val Pro Val Phe Ser Thr Thr Cys Ile Pro Gln
      20              25              30
Gly Ser Ile Leu Asp Ser Pro Ser Gly Pro Val Leu Pro Cys Phe Leu
      35              40              45
Cys Leu Phe Gln Gly Val Leu Ser Asp Leu Thr Lys Val Thr Arg Met
      50              55              60
His Gly Ile Asp Pro Val Val Leu Val Leu Met Val Gly Met Val Met
65              70              75              80
Phe Thr Leu Gly Phe Ala Gly Cys Val Gly Ala Leu Arg Glu Asn Ile
      85              90              95
Cys Leu Leu Asn Phe Val Ser Gly His Arg Asp Lys Ser Gly Ile
      100              105              110

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<210> 3191
 <211> 266
 <212> DNA
 <213> Homo sapiens

<400> 3191
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 accttttgcg gcagtcgcta aattgccacg ggtcgtcttt gctctctcta cttcggagcg
 120
 aacagcagga caatccacac ttccgtagcc tcctgggggtc ggccgccgag ccagcccggg
 180
 gcccgccgcc ccagcaccgc ttgcagggca gaaaagagaa gagagttgac aacatcgaga
 240
 tacagaaatt catctcccaa aaagcg
 266

<210> 3192
 <211> 84
 <212> PRT
 <213> Homo sapiens

<400> 3192
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 Cys Asn Gly Cys Trp Gly Gly Gly Pro Arg Ala Gly Ser Ala Ala Asp
 20 25 30
 Pro Arg Arg Leu Arg Lys Cys Gly Leu Ser Cys Cys Ser Leu Arg Ser
 35 40 45
 Arg Glu Ser Lys Asp Asp Pro Trp Gln Phe Ser Asp Cys Arg Lys Arg
 50 55 60
 Ser Arg Ser Met Ala Gln Val Ala Asp Thr Glu Gln Gly Thr Ile Ser
 65 70 75 80
 Pro Ser Ala Ser

<210> 3193
 <211> 567
 <212> DNA
 <213> Homo sapiens

<400> 3193
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 240
 gagtcagcgg ttcattgcttt gcatgcaaag tgcccagccc ctggctcaaa gtctgtgttc
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 360

gctggcctcg tgattcctct ctttcctgc aggccacggg tcacctactt ccccttctcc
 420
 ctgggccacc gctcctgcat cgggcagcag tttgctcaga tggaggtgaa ggtgggcatg
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 567

<210> 3194

<211> 116

<212> PRT

<213> Homo sapiens

<400> 3194

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Lys	Cys	Pro	Ala	Pro	Gly	Ser	Lys	Ser	Val	Phe	Ile	Gln	Thr	Trp	Val
			20					25					30		
Asn	Tyr	Cys	Leu	Pro	Tyr	Val	Val	Pro	Val	Gly	Thr	Pro	Gly	Ala	Ala
		35					40					45			
Gly	Leu	Val	Ile	Pro	Leu	Phe	Pro	Cys	Arg	Pro	Arg	Phe	Thr	Tyr	Phe
	50					55				60					
Pro	Phe	Ser	Leu	Gly	His	Arg	Ser	Cys	Ile	Gly	Gln	Gln	Phe	Ala	Gln
65					70					75					80
Met	Glu	Val	Lys	Val	Val	Met	Ala	Lys	Leu	Leu	Gln	Arg	Leu	Glu	Phe
				85					90					95	
Arg	Leu	Val	Pro	Gly	Gln	Arg	Phe	Gly	Leu	Gln	Glu	Gln	Ala	Thr	Leu
			100					105					110		
Lys	Pro	Leu	Asp												
			115												

<210> 3195

<211> 987

<212> DNA

<213> Homo sapiens

<400> 3195

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 120
 agccccagac acctacctcc ttggctggat cagccaaagg tgggcaagac ggttcacagc
 180
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<210> 3196

<211> 153

<212> PRT

<213> Homo sapiens

<400> 3196

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			20					25					30		
Ala	Ile	Arg	Lys	Pro	Gln	Thr	Pro	Thr	Ser	Leu	Ala	Gly	Ser	Ala	Lys
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	50					55					60				
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65					70					75				80	
Ser	Pro	Glu	Pro	Lys	Glu	Asp	Pro	Ala	His	Leu	Ser	Asp	Ser	Ser	Ser
				85					90					95	
Ser	Ser	Gly	Ser	Ile	Val	Ser	Phe	Lys	Ser	Ala	Asp	Ser	Ile	Lys	Ser
			100					105					110		
Arg	Pro	Gly	Ile	Pro	Arg	Leu	Ala	Gly	Asp	Gly	Gly	Glu	Arg	Thr	Ser
			115				120					125			
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<210> 3197

<211> 5575

<212> DNA

<213> Homo sapiens

<400> 3197

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<210> 3198

<211> 833

<212> PRT

<213> Homo sapiens

<400> 3198

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			20					25					30		
Asn	Val	Asp	Leu	Glu	Glu	Ala	Gly	Lys	Glu	Gly	Gly	Lys	Ser	Arg	Glu
			35				40						45		
Val	Met	Arg	Leu	Asn	Lys	Glu	Asp	Met	His	Leu	Phe	Gly	His	Tyr	Pro
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Ala	His	Asp	Asp	Phe	Tyr	Leu	Val	Val	Cys	Ser	Ala	Cys	Asn	Gln	Val
65					70					75				80	
Val	Lys	Pro	Gln	Val	Phe	Gln	Ser	His	Cys	Glu	Arg	Arg	His	Gly	Ser
			85						90					95	
Met	Cys	Arg	Pro	Ser	Pro	Ser	Pro	Val	Ser	Pro	Ala	Ser	Asn	Pro	Arg
			100					105					110		
Thr	Ser	Leu	Val	Gln	Val	Lys	Thr	Lys	Ala	Cys	Leu	Ser	Gly	His	His
			115					120					125		
Ser	Ala	Ser	Ser	Thr	Ser	Lys	Pro	Phe	Lys	Thr	Pro	Lys	Asp	Asn	Leu
	130					135					140				
Leu	Thr	Ser	Ser	Ser	Lys	Gln	His	Thr	Val	Phe	Pro	Ala	Lys	Gly	Ser
145					150					155				160	
Arg	Asp	Lys	Pro	Cys	Val	Pro	Val	Pro	Val	Val	Ser	Leu	Glu	Lys	Ile
				165				170						175	
Pro	Asn	Leu	Val	Lys	Ala	Asp	Gly	Ala	Asn	Val	Lys	Met	Asn	Ser	Thr
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Thr	Thr	Thr	Ala	Val	Ser	Ala	Ser	Pro	Thr	Ser	Ser	Ser	Ala	Val	Ser

		195					200					205					
Thr	Pro	Pro	Leu	Ile	Lys	Pro	Val	Leu	Met	Ser	Lys	Ser	Val	Pro	Pro		
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Ser	Pro	Glu	Lys	Ile	Leu	Asn	Gly	Lys	Gly	Ile	Leu	Pro	Thr	Thr	Ile		
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Asp	Lys	Lys	His	Gln	Asn	Gly	Thr	Lys	Asn	Ser	Asn	Lys	Pro	Tyr	Arg		
				245					250					255			
Arg	Leu	Ser	Glu	Arg	Glu	Phe	Asp	Pro	Asn	Lys	His	Cys	Gly	Val	Leu		
			260				265					270					
Asp	Pro	Glu	Thr	Lys	Lys	Pro	Cys	Thr	Arg	Ser	Leu	Thr	Cys	Lys	Thr		
		275				280						285					
His	Ser	Leu	Ser	His	Arg	Arg	Ala	Val	Pro	Gly	Arg	Lys	Lys	Gln	Phe		
	290				295		300										
Asp	Leu	Leu	Leu	Ala	Glu	His	Lys	Ala	Lys	Ser	Arg	Glu	Lys	Glu	Val		
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Lys	Asp	Lys	Glu	His	Leu	Leu	Thr	Ser	Thr	Arg	Glu	Ile	Leu	Pro	Ser		
				325					330					335			
Gln	Ser	Gly	Pro	Ala	Gln	Asp	Ser	Leu	Leu	Gly	Ser	Ser	Gly	Ser	Ser		
			340				345						350				
Gly	Pro	Glu	Pro	Lys	Val	Ala	Ser	Pro	Ala	Lys	Ser	Arg	Pro	Pro	Asn		
		355				360						365					
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	370				375						380						
Ser	Ser	Asn	His	Ser	Gly	His	Thr	Pro	Glu	Pro	Pro	Leu	Pro	Pro	Val		
385					390				395						400		
Gly	Gly	Asp	Leu	Ala	Ser	Arg	Leu	Ser	Ser	Asp	Glu	Gly	Glu	Met	Asp		
				405					410					415			
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			420				425					430					
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		435				440						445					
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	450				455						460						
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			500					505					510				
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		515					520					525					
Ile	Met	Thr	Ser	Ala	Met	Leu	Ser	Asp	Ala	Ala	Phe	Val	Thr	Ser	Pro		
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Pro	Leu	Ser	Gly	Pro	His	Lys	Lys	Asn	Cys	Val	Leu	Asn	Ala	Ser	Ser
		645		650		655									
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		660		665		670									
His	Asn	Ser	Asn	Asn	Gly	Val	Ser	Pro	Leu	Ser	Ala	Lys	Leu	Glu	Pro
		675		680		685									
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		690		695		700									
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Ser	Leu	Ala	Leu	His	Ala	Gly	Asp	Leu	Ser	Leu	Ala	Ser	His	Asn	Ala
		725		730		735									
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		740		745		750									
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		755		760		765									
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		770		775		780									
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785				790		795									800
Ser	Ser	Leu	Ala	Leu	Ser	Gln	Ser	Ser	Pro	Ser	Ser	Ile	Ser	Ser	Pro
		805		810		815									
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<210> 3199

<211> 777

<212> DNA

<213> Homo sapiens

<400> 3199

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120

caagcagctc ccacagctgg cactggggaa cgtggtgaca cccagaagct tggagatgcc
180

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<210> 3200

<211> 92

<212> PRT

<213> Homo sapiens

<400> 3200

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Leu	Leu	Phe	Gly	Gln	Pro	Arg	Pro	Arg	Ser	Ser	Leu	Ser	Gln	Gly	Cys
			20					25					30		
Asp	Thr	Leu	Phe	Gly	Ala	Leu	Arg	Phe	Leu	Ala	Ser	Pro	Ser	Phe	Trp
		35					40						45		
Val	Ser	Pro	Arg	Ser	Pro	Val	Pro	Ala	Val	Gly	Ala	Ala	Cys	Cys	Met
	50					55				60					
Pro	Gly	Pro	Ala	Thr	Ala	Ser	Gln	Arg	Ala	Gly	Ala	Leu	Thr	Ser	Thr
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Trp	Ser	Cys	Leu	Pro	His	Cys	Ser	Ser	Arg	Arg	Val				
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<210> 3201

<211> 390

<212> DNA

<213> Homo sapiens

<400> 3201

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<210> 3202

<211> 116

<212> PRT

<213> Homo sapiens

<400> 3202

Met Gly Thr Arg Lys Gln Leu Pro Ser Arg Leu Pro Gln Ala Gly Arg

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Gly Thr Glu	Val Ser Ser Cys	Thr Gly Ala Arg	Ile Pro Asn Thr Ala
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Val Ala Glu	Gly Pro Gly Gly	Val Gln Val Pro	Asn Pro Ser Glu Pro
	50	55	60
Asp Pro Asp	Met Gly Pro Val	Ser Trp Gly Pro	Pro Leu Cys Pro Val
65	70	75	80
Val Ala Asp	Pro Glu Arg Glu	Gly Cys Gly Asp	Ala His Met Thr Leu
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Gly Ser Gln	Arg Gln Pro Leu	Leu Thr Leu Arg	Val Pro Gly Ala Ser
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<210> 3203

<211> 1906

<212> DNA

<213> Homo sapiens

<400> 3203

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960

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 1906

<210> 3204

<211> 424

<212> PRT

<213> Homo sapiens

<400> 3204

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			20					25					30		
His	Arg	Leu	Cys	Gly	Asp	Leu	Val	Ser	Cys	Phe	Gln	Glu	Arg	Ala	Arg
		35					40					45			
Ile	Glu	Lys	Ala	Tyr	Ala	Gln	Gln	Leu	Ala	Asp	Trp	Ala	Arg	Lys	Trp
	50					55				60					
Arg	Gly	Thr	Val	Glu	Lys	Gly	Pro	Gln	Tyr	Gly	Thr	Leu	Glu	Lys	Ala
65					70				75					80	
Trp	His	Ala	Phe	Phe	Thr	Ala	Ala	Glu	Arg	Leu	Ser	Ala	Leu	His	Leu
			85					90					95		
Glu	Val	Arg	Glu	Lys	Leu	Gln	Gly	Gln	Asp	Ser	Glu	Arg	Val	Arg	Ala
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Trp	Gln	Arg	Gly	Ala	Phe	His	Arg	Pro	Val	Leu	Gly	Gly	Phe	Arg	Glu

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<210> 3206

<211> 494

<212> PRT

<213> Homo sapiens

<400> 3206

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Arg	Ser	Pro	Pro	Gly	Leu	Ala	Lys	Thr	Pro	Leu	Ser	Ala	Leu	Gly	Leu
			20					25					30		
Lys	Pro	His	Asn	Pro	Ala	Asp	Ile	Leu	Leu	His	Pro	Thr	Gly	Glu	Pro

		35				40				45					
Arg	Ser	Tyr	Val	Glu	Ser	Val	Ala	Arg	Thr	Ala	Val	Ala	Gly	Pro	Arg
	50					55					60				
Ala	Gln	Asp	Ser	Glu	Pro	Lys	Ser	Phe	Ser	Ala	Pro	Ala	Thr	Gln	Ala
65					70					75				80	
Tyr	Gly	His	Glu	Ile	Pro	Leu	Arg	Asn	Gly	Thr	Leu	Gly	Gly	Ser	Phe
			85						90					95	
Val	Ser	Pro	Ser	Pro	Leu	Ser	Thr	Ser	Ser	Pro	Ile	Leu	Ser	Ala	Asp
			100					105					110		
Ser	Thr	Ser	Val	Gly	Ser	Phe	Pro	Ser	Gly	Glu	Ser	Ser	Asp	Gln	Gly
	115						120					125			
Pro	Arg	Thr	Pro	Thr	Gln	Pro	Leu	Leu	Glu	Ser	Gly	Phe	Arg	Ser	Gly
	130					135					140				
Ser	Leu	Gly	Gln	Pro	Ser	Pro	Ser	Ala	Gln	Arg	Asn	Tyr	Gln	Ser	Ser
145					150					155					160
Ser	Pro	Leu	Pro	Thr	Val	Gly	Ser	Ser	Tyr	Ser	Ser	Pro	Asp	Tyr	Ser
			165						170					175	
Leu	Gln	His	Phe	Ser	Ser	Ser	Pro	Glu	Ser	Gln	Ala	Arg	Ala	Gln	Phe
			180					185					190		
Ser	Val	Ala	Gly	Val	His	Thr	Val	Pro	Gly	Ser	Pro	Gln	Ala	Arg	His
	195						200					205			
Arg	Thr	Val	Gly	Thr	Asn	Thr	Pro	Pro	Ser	Pro	Gly	Phe	Gly	Trp	Arg
	210					215					220				
Ala	Ile	Asn	Pro	Ser	Met	Ala	Ala	Pro	Ser	Ser	Pro	Ser	Leu	Ser	His
225					230					235					240
His	Gln	Met	Met	Gly	Pro	Pro	Gly	Thr	Gly	Phe	His	Gly	Ser	Thr	Val
			245						250					255	
Ser	Ser	Pro	Gln	Ser	Ser	Ala	Ala	Thr	Pro	Gly	Ser	Pro	Ser	Leu	
			260					265				270			
Cys	Arg	His	Pro	Ala	Gly	Val	Tyr	Gln	Val	Ser	Gly	Leu	His	Asn	Lys
	275						280				285				
Val	Ala	Thr	Thr	Pro	Gly	Ser	Pro	Ser	Leu	Gly	Arg	His	Pro	Gly	Ala
	290					295					300				
His	Gln	Gly	Asn	Leu	Ala	Ser	Gly	Leu	His	Ser	Asn	Ala	Ile	Ala	Ser
305					310					315					320
Pro	Gly	Ser	Pro	Ser	Leu	Gly	Arg	His	Leu	Gly	Gly	Ser	Gly	Ser	Val
			325						330					335	
Val	Pro	Gly	Ser	Pro	Cys	Leu	Asp	Arg	His	Val	Ala	Tyr	Gly	Gly	Tyr
			340					345					350		
Ser	Thr	Pro	Glu	Asp	Arg	Arg	Pro	Thr	Leu	Ser	Arg	Gln	Ser	Ser	Ala
	355						360					365			
Ser	Gly	Tyr	Gln	Ala	Pro	Ser	Thr	Pro	Ser	Phe	Pro	Val	Ser	Pro	Ala
	370					375					380				
Tyr	Tyr	Pro	Gly	Leu	Ser	Ser	Pro	Ala	Thr	Ser	Pro	Ser	Pro	Asp	Ser
385					390					395					400
Ala	Ala	Phe	Arg	Gln	Gly	Ser	Pro	Thr	Pro	Ala	Leu	Pro	Glu	Lys	Arg
			405						410					415	
Arg	Met	Ser	Val	Gly	Asp	Arg	Ala	Gly	Ser	Leu	Pro	Asn	Tyr	Ala	Thr
			420					425					430		
Ile	Asn	Gly	Lys	Val	Ser	Ser	Pro	Val	Ala	Ser	Gly	Met	Ser	Ser	Pro
	435						440					445			
Ser	Gly	Gly	Ser	Thr	Val	Ser	Phe	Ser	His	Thr	Leu	Pro	Asp	Phe	Ser
	450					455					460				
Lys	Tyr	Ser	Met	Pro	Asp	Asn	Ser	Pro	Glu	Thr	Arg	Ala	Lys	Val	Lys

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Phe Val Gln Asp Thr Ser Lys Tyr Trp Tyr Lys Pro Lys Ile
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<210> 3207
<211> 495
<212> DNA
<213> Homo sapiens
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120
ctgtcgcgca agctgcataa gatcctggag acgcggctgg acaacgacaa ggagatgtta
180
gaagctctca aggcactttc aacctttttt gttgaaaata gtctgcggaac tcgaagaaat
240
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300
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360
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420
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480
gccttcttat ccaag
495
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<210> 3208
<211> 107
<212> PRT
<213> Homo sapiens
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<400> 3208
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Leu Arg Thr Arg Arg Asn Leu Arg Gly Asp Ile Glu Arg Lys Ser Leu
              20              25              30
Ala Ile Asn Glu Glu Phe Val Ser Ile Phe Lys Glu Val Lys Glu Glu
              35              40              45
Leu Glu Ser Ile Ser Glu Asp Val Gln Ala Met Ser Asn Cys Cys Gln
 50              55              60
Asp Met Thr Ser Arg Leu Gln Ala Ala Lys Glu Gln Thr Gln Asp Leu
65              70              75              80
Ile Val Asn Thr Thr Lys Leu Gln Ser Glu Ser Gln Lys Leu Glu Ile
              85              90              95
Arg Ala Gln Val Ala Asp Ala Phe Leu Ser Lys
              100              105

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<210> 3209
<211> 346
<212> DNA
<213> Homo sapiens
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<400> 3209

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120
gaagaatcag cccacacagt caggggtgtg ttagtgggga acgggctctg ggctcctgtg
180
ggaaccaggg accccctatc ttggtaccgg tcattggatg tatccccagc tcatgcctgt
240
gtctgtcttg gcccggtgtg tcaccctgtg ttcattctctc tcccagccat ggctctctca
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346

<210> 3210

<211> 95

<212> PRT

<213> Homo sapiens

<400> 3210

Met	Arg	Pro	Ala	Leu	Ser	Leu	Leu	Thr	Trp	Ala	Leu	Pro	Thr	Gly	Lys
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Cys	Ser	His	Ser	Arg	Arg	Ile	Ser	Pro	Thr	Val	Gln	Gly	Cys	Val	Ser
			20					25					30		
Gly	Glu	Arg	Ala	Leu	Gly	Ser	Cys	Gly	Asn	Gln	Gly	Pro	Pro	Ile	Leu
			35				40					45			
Val	Pro	Val	Ile	Gly	Cys	Ile	Pro	Ser	Ser	Cys	Leu	Cys	Leu	Ser	Trp
			50			55					60				
Pro	Val	Trp	Ser	Pro	Cys	Val	His	Leu	Ser	Pro	Ser	His	Gly	Leu	Ser
65					70					75				80	
Asn	Trp	Gly	Phe	Arg	Leu	Pro	Met	Arg	Gly	Ser	Trp	Tyr	Val	Arg	
				85					90					95	

<210> 3211

<211> 1728

<212> DNA

<213> Homo sapiens

<400> 3211

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gtttccttgg ccatcgtgca agccagtccg aaggaccagg gactctatta ctgctgcatc
180
aagaacagct acggaaaagt gactgctgaa tttaacctca cagctgaagt tctcaaacag
240
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420

cggcctcatg cctgtcttca aacctggcca tgcctgtgtg cctaagggtgc acaatgccat
 480
 tgcctatggg accagaaata atgatgagct catccaaagg aactacaaac tcgctgccca
 540
 ggaatgctat gttcaaaata ctgccaggta ttatgccaag atctacgctg ctgaagcaca
 600
 gcctctggaa ggctttggag aagtacctga gatcattcct atttttctta tccatcggcc
 660
 tgagaacaat atcccgatg ctacagtggg ggaggagctg attggagaat ttgtgaagta
 720
 ttccatcagg gatgggaaag aaataaactt cttgagaaga gaatcagaag ctggtcagaa
 780
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<210> 3212

<211> 87

<212> PRT

<213> Homo sapiens

<400> 3212

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5

10

15

Ser Thr Val Cys Trp Thr Lys Asp Ser Lys Ser Ile Ala Gln Ala Lys

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                20                25                30
Lys Ser Ala Gly Asp Asn Ser Ser Val Ser Leu Ala Ile Val Gln Ala
                35                40                45
Ser Pro Lys Asp Gln Gly Leu Tyr Tyr Cys Cys Ile Lys Asn Ser Tyr
                50                55                60
Gly Lys Val Thr Ala Glu Phe Asn Leu Thr Ala Glu Val Leu Lys Gln
65                70                75                80
Leu Ser Ser His Thr Glu Tyr
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<210> 3213

<211> 348

<212> DNA

<213> Homo sapiens

<400> 3213

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120
gataaacatg cccaactcat cttggcccaa atcaataaga tgagaaatgg acagcatttc
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240
gccagcagtc cttactttgc agctttgttc actggaggaa tgaaagagtc ctcaaaagat
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348

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<210> 3214

<211> 92

<212> PRT

<213> Homo sapiens

<400> 3214

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Met Ala Asn Glu Asp Cys Pro Lys Ala Ala Asp Ser Pro Phe Ser Ser
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Asp Lys His Ala Gln Leu Ile Leu Ala Gln Ile Asn Lys Met Arg Asn
                20                25                30
Gly Gln His Phe Cys Asp Val Gln Leu Gln Val Gly Gln Glu Ser Phe
                35                40                45
Lys Ala His Arg Leu Val Leu Ala Ala Ser Ser Pro Tyr Phe Ala Ala
50                55                60
Leu Phe Thr Gly Gly Met Lys Glu Ser Ser Lys Asp Val Val Pro Ile
65                70                75                80
Leu Gly Ile Glu Ala Gly Ile Phe Gln Ile Leu Leu
                85                90

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<210> 3215

<211> 597

<212> DNA

<213> Homo sapiens

<400> 3215

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 120
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 180
 catgacttta tcctgcaggc cgagcgggaa acgttcatcg agcagatgaa ggatgtcatg
 240
 gacaaggcag aggacatgct cagcgaggac acagacgccg accgtggctc cgacccaggg
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 accagcccgc cacacctcag cacctgcggc ctgggcaccg gggaggagag ccgacaatcc
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 caagccaacg cccccgtgta tcagcagaac gtcctgcaca ccgggaagag gtgggttcac
 420
 atctgtccgg tgctgagcc ccccgcccc gagggccctt gaatcttcgc cccacttcc
 480
 tctaagctcc ctgccgccag aagccagcca agattcagcg ccctataaag accagctgtc
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 597

<210> 3216

<211> 153

<212> PRT

<213> Homo sapiens

<400> 3216

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Ile	Leu	Asn	Val	Cys	Asn	Thr	Gly	Asp	Lys	Met	Val	Glu	Cys	Gln	Leu
			20					25					30		
Glu	Thr	His	Asn	His	Lys	Met	Val	Thr	Phe	Lys	Phe	Asp	Leu	Asp	Gly
		35					40					45			
Asp	Ala	Pro	Asp	Glu	Ile	Ala	Thr	Tyr	Met	Val	Glu	His	Asp	Phe	Ile
	50					55					60				
Leu	Gln	Ala	Glu	Arg	Glu	Thr	Phe	Ile	Glu	Gln	Met	Lys	Asp	Val	Met
65				70					75					80	
Asp	Lys	Ala	Glu	Asp	Met	Leu	Ser	Glu	Asp	Thr	Asp	Ala	Asp	Arg	Gly
				85					90					95	
Ser	Asp	Pro	Gly	Thr	Ser	Pro	Pro	His	Leu	Ser	Thr	Cys	Gly	Leu	Gly
			100					105					110		
Thr	Gly	Glu	Glu	Ser	Arg	Gln	Ser	Gln	Ala	Asn	Ala	Pro	Val	Tyr	Gln
		115				120						125			
Gln	Asn	Val	Leu	His	Thr	Gly	Lys	Arg	Trp	Phe	Ile	Ile	Cys	Pro	Val
	130					135						140			
Pro	Glu	Pro	Pro	Ala	Pro	Glu	Gly	Pro							
145					150										

<210> 3217

<211> 2570

<212> DNA

<213> Homo sapiens

<400> 3217

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240
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gtaaaggaga aagaagccat attgaaagaa gctgagagag agctacaggc caaatttgag
360
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420
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<210> 3218

<211> 181

<212> PRT

<213> Homo sapiens

<400> 3218

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Glu	Asn	His	Cys	Asp	Phe	Val	Lys	Leu	Arg	Glu	Met	Leu	Ile	Cys	Thr
			20					25					30		
Asn	Met	Glu	Asp	Leu	Arg	Glu	Gln	Thr	His	Thr	Arg	His	Tyr	Glu	Leu
		35					40					45			
Tyr	Arg	Arg	Cys	Lys	Leu	Glu	Glu	Met	Gly	Phe	Thr	Asp	Val	Gly	Pro
		50				55					60				
Glu	Asn	Lys	Pro	Val	Ser	Val	Gln	Glu	Thr	Tyr	Glu	Ala	Lys	Arg	His
65					70				75					80	
Glu	Phe	His	Gly	Glu	Arg	Gln	Arg	Lys	Glu	Glu	Glu	Met	Lys	Gln	Met
			85					90						95	
Phe	Val	Gln	Arg	Val	Lys	Glu	Lys	Glu	Ala	Ile	Leu	Lys	Glu	Ala	Glu
		100					105				110				
Arg	Glu	Leu	Gln	Ala	Lys	Phe	Glu	His	Leu	Lys	Arg	Leu	His	Gln	Glu

	115		120		125	
Glu	Arg	Met	Lys	Leu	Glu	Glu
	130		135		140	
Ile	Ala	Phe	Ser	Lys	Lys	Lys
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Ser	Phe	Leu	Ala	Thr	Gly	Ser
		165		170		175
Asn	Ser	Asn	Phe	Leu		
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<210> 3219

<211> 1241

<212> DNA

<213> Homo sapiens

<400> 3219

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120
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180
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240
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300
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360
acggccccca tgcggccctc ctactctgca caggagggtt tagctggcta ccagaggag
420
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480
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540
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600
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660
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720
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780
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960
accctgagc cagccccacg ggctctctctg gagtctgtcc ctctggcag gtcttactca
1020
ccttatgact atcagccatg tttggctggg cctaaccagg atttccattc aaagagccca
1080
gcctcttcc ccttgccctg cttccttccg accaccaca gccctccagg gcctcagcaa
1140

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ggggacatgg gcactcctgt gaacagtttt tcacttttga tgaaacgggg aaccaagagg
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 1260
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 1320
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 1440
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<210> 3222

<211> 331

<212> PRT

<213> Homo sapiens

<400> 3222

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Trp	Val	Glu	Glu	Pro	Gln	Arg	Ser	Cys	Thr	Ala	Arg	Arg	Trp	His	Ile
			20					25					30		
Gln	Ala	Thr	Gly	Gly	Val	Glu	Pro	Ala	Gly	Trp	Lys	Glu	Met	Arg	Cys
		35					40					45			
His	Leu	Arg	Ala	Asn	Gly	Tyr	Leu	Cys	Lys	Tyr	Gln	Phe	Glu	Val	Leu
	50					55					60				
Cys	Pro	Ala	Pro	Arg	Pro	Gly	Ala	Ala	Ser	Asn	Leu	Ser	Tyr	Arg	Ala
65					70					75					80
Pro	Phe	Gln	Leu	His	Ser	Ala	Ala	Leu	Asp	Phe	Ser	Pro	Pro	Gly	Thr
				85					90					95	
Glu	Val	Ser	Ala	Leu	Cys	Arg	Gly	Gln	Leu	Pro	Ile	Ser	Val	Thr	Cys
			100					105					110		
Ile	Ala	Asp	Glu	Ile	Gly	Ala	Arg	Trp	Asp	Lys	Leu	Ser	Gly	Asp	Val
		115					120					125			
Leu	Cys	Pro	Cys	Pro	Gly	Arg	Tyr	Leu	Arg	Ala	Gly	Lys	Cys	Ala	Glu
	130					135					140				
Leu	Pro	Asn	Cys	Leu	Asp	Asp	Leu	Gly	Gly	Phe	Ala	Cys	Glu	Cys	Ala
145					150					155					160
Thr	Gly	Phe	Glu	Leu	Gly	Lys	Asp	Gly	Arg	Ser	Cys	Val	Thr	Ser	Gly
				165					170					175	
Glu	Gly	Gln	Pro	Thr	Leu	Gly	Gly	Thr	Gly	Val	Pro	Thr	Arg	Arg	Pro
			180					185					190		
Pro	Ala	Thr	Ala	Thr	Ser	Pro	Val	Pro	Gln	Arg	Thr	Trp	Pro	Ile	Arg
		195					200					205			
Val	Asp	Glu	Lys	Leu	Gly	Glu	Thr	Pro	Leu	Val	Pro	Glu	Gln	Asp	Asn
	210					215					220				
Ser	Val	Thr	Ser	Ile	Pro	Glu	Ile	Pro	Arg	Trp	Gly	Ser	Gln	Ser	Thr
225					230					235					240
Met	Ser	Thr	Leu	Gln	Met	Ser	Leu	Gln	Ala	Glu	Ser	Lys	Ala	Thr	Ile

				245					250					255			
Thr	Pro	Ser	Gly	Ser	Val	Ile	Ser	Lys	Phe	Asn	Ser	Thr	Thr	Ser	Ser		
			260					265					270				
Ala	Thr	Pro	Gln	Ala	Phe	Asp	Ser	Ser	Ser	Ala	Val	Val	Phe	Ile	Phe		
		275					280					285					
Val	Ser	Thr	Ala	Val	Val	Val	Leu	Val	Ile	Leu	Thr	Met	Thr	Val	Leu		
	290					295				300							
Gly	Leu	Val	Lys	Leu	Cys	Phe	His	Glu	Ser	Pro	Ser	Ser	Gln	Pro	Arg		
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Lys	Glu	Ser	Met	Gly	Pro	Pro	Gly	Cys	Asp	Glu							
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<210> 3223

<211> 985

<212> DNA

<213> Homo sapiens

<400> 3223

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180
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240
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420
tctagtgtcc tgcggccagg cgccctgact cctctgcagc gcttcgcag cctgcagcag
480
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540
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600
aatgatgtgg acagcaacga cctggagaga caaggcctac ttctggggcg tggcgctctt
660
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720
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<210> 3224

<211> 224

<212> PRT

<213> Homo sapiens

<400> 3224

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Ser Asn Pro Asp Ser Leu Ile Phe Gly Ala Leu Thr Ile Met Thr Gly
      20           25           30
Val Ile Gly Val Ile Leu Gly Ala Glu Ala Ser Arg Arg Tyr Lys Lys
      35           40           45
Val Ile Pro Gly Ala Glu Pro Leu Ile Cys Ala Ser Ser Leu Leu Ala
      50           55           60
Thr Ala Pro Cys Leu Tyr Leu Ala Leu Val Leu Ala Pro Thr Thr Leu
65           70           75           80
Leu Ala Ser Tyr Val Phe Leu Gly Leu Gly Glu Leu Leu Leu Ser Cys
      85           90           95
Asn Trp Ala Val Val Ala Asp Ile Leu Leu Ser Val Val Val Pro Arg
      100           105           110
Cys Arg Gly Thr Ala Glu Ala Leu Gln Ile Thr Val Gly His Ile Leu
      115           120           125
Gly Asp Ala Gly Ser Pro Tyr Leu Thr Gly Leu Ile Ser Ser Val Leu
      130           135           140
Arg Pro Gly Ala Leu Thr Pro Leu Gln Arg Phe Arg Ser Leu Gln Gln
145           150           155           160
Ser Phe Leu Cys Cys Ala Phe Val Ile Ala Leu Gly Gly Gly Cys Phe
      165           170           175
Leu Leu Thr Ala Leu Tyr Leu Glu Arg Asp Glu Thr Arg Ala Trp Gln
      180           185           190
Pro Val Thr Gly Thr Pro Asp Ser Asn Asp Val Asp Ser Asn Asp Leu
      195           200           205
Glu Arg Gln Gly Leu Leu Ser Gly Ala Gly Ala Ser Thr Glu Glu Pro
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<210> 3225

<211> 506

<212> DNA

<213> Homo sapiens

<400> 3225

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240
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300
aagtggaacc acagcctcaa cccacacaga ggatggaacc accttctgca gctaaaaata
360
accacaccgc ctttgagggt agccacccaa gatgcagggt gggctgtatg aaactccacg
420

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aacatgggat gagtttcatt ttcaggggttc cgagggggcca tgagtgggtac caagatccct
 480
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 506

<210> 3226
 <211> 137
 <212> PRT
 <213> Homo sapiens

<400> 3226
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 Cys Phe Pro Val Pro Lys Met Pro Val Pro Cys Ala Leu Gly Glu Glu
 35 40 45
 Leu Val Pro Cys His Arg Gly Thr Gly Pro Ala Val Val Trp Pro Ala
 50 55 60
 Gln Pro Gln Gln Gly Glu Val Glu Pro Gln Pro Gln Pro Thr Gln Arg
 65 70 75 80
 Met Glu Pro Pro Ser Ala Ala Lys Asn Asn His Thr Ala Phe Glu Val
 85 90 95
 Ser His Pro Arg Cys Arg Trp Gly Cys Met Lys Leu His Glu His Gly
 100 105 110
 Met Ser Phe Ile Phe Arg Val Pro Arg Gly His Glu Trp Tyr Gln Asp
 115 120 125
 Pro Trp Arg Cys Pro Trp Phe Pro Met
 130 135

<210> 3227
 <211> 1623
 <212> DNA
 <213> Homo sapiens

<400> 3227
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 120
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 180
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 240
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 360
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 420
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 480
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 540

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 1623

<210> 3228

<211> 385

<212> PRT

<213> Homo sapiens

<400> 3228

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Thr	Leu	Val	Pro	Glu	Glu	Pro	Glu	Asp	Met	Trp	His	Thr	Tyr	Asn	Leu
			20					25					30		
Val	Gln	Val	Gly	Asp	Ser	Leu	Arg	Ala	Ser	Thr	Ile	Arg	Lys	Val	Gln
			35					40					45		
Thr	Glu	Ser	Ser	Thr	Gly	Ser	Val	Gly	Ser	Asn	Arg	Val	Arg	Thr	Thr
			50					55					60		
Leu	Thr	Leu	Cys	Val	Glu	Ala	Ile	Asp	Phe	Asp	Ser	Gln	Ala	Cys	Gln

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65          70          75          80
Leu Arg Val Lys Gly Thr Asn Ile Gln Glu Asn Glu Tyr Val Lys Met
      85          90          95
Gly Ala Tyr His Thr Ile Glu Leu Glu Pro Asn Arg Gln Phe Thr Leu
      100        105        110
Ala Lys Lys Gln Trp Asp Ser Val Val Leu Glu Arg Ile Glu Gln Ala
      115        120        125
Cys Asp Pro Ala Trp Ser Ala Asp Val Ala Ala Val Val Met Gln Glu
      130        135        140
Gly Leu Ala His Ile Cys Leu Val Thr Pro Ser Met Thr Leu Thr Arg
145          150          155          160
Ala Lys Val Glu Val Asn Ile Pro Arg Lys Arg Lys Gly Asn Cys Ser
      165        170        175
Gln His Asp Arg Ala Leu Glu Arg Phe Tyr Glu Gln Val Val Gln Ala
      180        185        190
Ile Gln Arg His Ile His Phe Asp Val Val Lys Cys Ile Leu Val Ala
      195        200        205
Ser Pro Gly Phe Val Arg Glu Gln Phe Cys Asp Tyr Met Phe Gln Gln
      210        215        220
Ala Val Lys Thr Asp Asn Lys Leu Leu Leu Glu Asn Arg Ser Lys Phe
225          230          235          240
Leu Gln Val His Ala Ser Ser Gly His Lys Tyr Ser Leu Lys Glu Ala
      245        250        255
Leu Cys Asp Pro Thr Val Ala Ser Arg Leu Ser Asp Thr Lys Ala Ala
      260        265        270
Gly Glu Val Lys Ala Leu Asp Asp Phe Tyr Lys Met Leu Gln His Glu
      275        280        285
Pro Asp Arg Ala Phe Tyr Gly Leu Lys Gln Val Glu Lys Ala Asn Glu
      290        295        300
Ala Met Ala Ile Asp Thr Leu Leu Ile Ser Asp Glu Leu Phe Arg His
305          310          315          320
Gln Asp Val Ala Thr Arg Ser Arg Tyr Val Arg Leu Val Asp Ser Val
      325        330        335
Lys Glu Asn Ala Gly Thr Val Arg Ile Phe Ser Ser Leu His Val Ser
      340        345        350
Gly Glu Gln Leu Ser Gln Leu Thr Gly Val Ala Ala Ile Leu Arg Phe
      355        360        365
Pro Val Pro Glu Leu Ser Asp Gln Glu Gly Asp Ser Ser Ser Glu Glu
      370        375        380
Asp
385

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<210> 3229

<211> 1008

<212> DNA

<213> Homo sapiens

<400> 3229

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120
ggccggctaa ggtgcgcgtg ctgcgtggtt ctaacccttc tgttgggcgt ttctgctgag
180

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aggcgggagg cgctgagagt ctgtgcggag gtccgtggac agactgcttt gctcgttgtt
240
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300
cagccgacca ttatggaaga cggcaagcgg gagagggtggc ccaccctcat ggagcgcttg
360
tgctcggatg gcttcgcatt tccccaatac cccattaaac cgtatcatct gaagaggatc
420
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480
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540
caaccggaaa tggtagatct cctggtgtcc agaagatgtg agcttaacct ctgcgaccgt
600
gaagacagga cacctctgat caaggctgta caactgaggc aggaggcttg tgcaactctt
660
ctgctgcaaa atggcgccga tccaaatatt acggatgtct ttggaaggac tgctctgcac
720
tacgctgtgt ataatgaaga tacatccatg atagaaaaac ttctttcaca tggtagaaat
780
attgaagaat gcagcaagaa tgaatatcag ccactgttac ttgctgtgag tcgaagaaaa
840
gtgaaaaatgg tggaattttt attaaagaaa aaagcaaatg taaatgccat tgattatctt
900
ggcagatcag cctcatact tgctgttact cttggagaaa aagatatagt cattcttctt
960
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1008

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<210> 3230

<211> 232

<212> PRT

<213> Homo sapiens

<400> 3230

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Met Glu Asp Gly Lys Arg Glu Arg Trp Pro Thr Leu Met Glu Arg Leu
 1          5          10          15
Cys Ser Asp Gly Phe Ala Phe Pro Gln Tyr Pro Ile Lys Pro Tyr His
          20          25          30
Leu Lys Arg Ile His Arg Ala Val Leu Arg Gly Asn Leu Glu Glu Leu
          35          40          45
Lys Tyr Leu Leu Leu Thr Tyr Tyr Asp Ile Asn Lys Arg Asp Arg Lys
          50          55          60
Glu Arg Thr Ala Leu His Leu Ala Cys Ala Thr Gly Gln Pro Glu Met
65          70          75          80
Val His Leu Leu Val Ser Arg Arg Cys Glu Leu Asn Leu Cys Asp Arg
          85          90          95
Glu Asp Arg Thr Pro Leu Ile Lys Ala Val Gln Leu Arg Gln Glu Ala
          100          105          110
Cys Ala Thr Leu Leu Leu Gln Asn Gly Ala Asp Pro Asn Ile Thr Asp
          115          120          125
Val Phe Gly Arg Thr Ala Leu His Tyr Ala Val Tyr Asn Glu Asp Thr
          130          135          140
Ser Met Ile Glu Lys Leu Leu Ser His Gly Thr Asn Ile Glu Glu Cys

```

145		150		155		160									
Ser	Lys	Asn	Glu	Tyr	Gln	Pro	Leu	Leu	Leu	Ala	Val	Ser	Arg	Arg	Lys
				165					170					175	
Val	Lys	Met	Val	Glu	Phe	Leu	Leu	Lys	Lys	Lys	Ala	Asn	Val	Asn	Ala
			180					185					190		
Ile	Asp	Tyr	Leu	Gly	Arg	Ser	Ala	Leu	Ile	Leu	Ala	Val	Thr	Leu	Gly
		195					200					205			
Glu	Lys	Asp	Ile	Val	Ile	Leu	Leu	Leu	Gln	His	Asn	Ile	Asp	Val	Phe
	210					215					220				
Ser	Arg	Asp	Val	Tyr	Gly	Lys	Leu								
225					230										

<210> 3231

<211> 1367

<212> DNA

<213> Homo sapiens

<400> 3231

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nnacgcgtga aggggaagtt tcgcctcaga aggcctgcctc gctgggtccga attcgggtggc
60
gccacgtccg cccgtctccg ccttctgcat cgcggcttcg gcggcttcca cctagacacc
120
taacagtcgc ggagccggcc gcgtcgtgag ggggtcggca cggggagtcg ggcgggtcttg
180
tgcattcttg ctacctgtgg gtcgaagatg tcggacatcg gagactgggt caggagcatc
240
ccggcgatca cgcgctattg gttcgccgcc accgtcgccg tgcccttggc cggcaaaactc
300
ggcctcatca gcccggccta cctcttcctc tggcccgaag ccttccttta tcgctttcag
360
atctggaggc caatcactgc caccttttat ttccctgtgg gtccaggaaac tggattttctt
420
tatttggtca atttatattt cttatatcag tattctacgc gacttgaaac aggagctttt
480
gatgggaggc cagcagacta tttattcatg ctccctctta actggatttg catcgtgatt
540
actggcttag caatggatat gcagttgctg atgattcctc tgatcatgtc agtactttat
600
gtctgggccc agctgaacag agacatgatt gtatcatttt ggtttggaac acgatttaag
660
gcctgctatt taccctgggt tatccttgga ttcaactata tcatcggagg ctcggtaatc
720
aatgagctta ttggaaatct ggttgacat ctttattttt tcctaagtgt cagataccca
780
atggacttgg gaggaagaaa ttttctatcc acacctcagt tttgtaccg ctggctgccc
840
agtaggagag gaggagtatc aggatttggg gtgccccctg ctagcatgag gcgagctgct
900
gatcagaatg gcggaggcgg gagacacaac tggggccagg gctttcgact tggagaccag
960
tgaaggggcg gcctcgggca gccgtcctc tcaagccaca tttcctccca gtgctgggtg
1020
cacttaacaa ctgcgttctg gctaacactg ttggacctga cccacactga atgtagtctt
1080

```

tcagtagcag acaaagtttc ttaaattcccg aagaaaaata taagtgttcc acaagtttca
 1140
 cgatttcat tcaagtcctt actgctgtga agaacaaata ccaactgtgc aaattgcaaa
 1200
 actgactaca ttttttggtg tttttttttt tcccccttcc gttctgaata atggggtttta
 1260
 gcgggtccta gtctgctggc attgagctgg ggctgggtca ccaaaccctt cccaaaagga
 1320
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 1367

<210> 3232

<211> 251

<212> PRT

<213> Homo sapiens

<400> 3232

Met	Ser	Asp	Ile	Gly	Asp	Trp	Phe	Arg	Ser	Ile	Pro	Ala	Ile	Thr	Arg
1				5					10					15	
Tyr	Trp	Phe	Ala	Ala	Thr	Val	Ala	Val	Pro	Leu	Val	Gly	Lys	Leu	Gly
			20					25					30		
Leu	Ile	Ser	Pro	Ala	Tyr	Leu	Phe	Leu	Trp	Pro	Glu	Ala	Phe	Leu	Tyr
		35					40					45			
Arg	Phe	Gln	Ile	Trp	Arg	Pro	Ile	Thr	Ala	Thr	Phe	Tyr	Phe	Pro	Val
	50					55					60				
Gly	Pro	Gly	Thr	Gly	Phe	Leu	Tyr	Leu	Val	Asn	Leu	Tyr	Phe	Leu	Tyr
65					70					75				80	
Gln	Tyr	Ser	Thr	Arg	Leu	Glu	Thr	Gly	Ala	Phe	Asp	Gly	Arg	Pro	Ala
			85						90				95		
Asp	Tyr	Leu	Phe	Met	Leu	Leu	Phe	Asn	Trp	Ile	Cys	Ile	Val	Ile	Thr
		100						105					110		
Gly	Leu	Ala	Met	Asp	Met	Gln	Leu	Leu	Met	Ile	Pro	Leu	Ile	Met	Ser
	115						120					125			
Val	Leu	Tyr	Val	Trp	Ala	Gln	Leu	Asn	Arg	Asp	Met	Ile	Val	Ser	Phe
	130					135					140				
Trp	Phe	Gly	Thr	Arg	Phe	Lys	Ala	Cys	Tyr	Leu	Pro	Trp	Val	Ile	Leu
145					150					155				160	
Gly	Phe	Asn	Tyr	Ile	Ile	Gly	Gly	Ser	Val	Ile	Asn	Glu	Leu	Ile	Gly
			165					170					175		
Asn	Leu	Val	Gly	His	Leu	Tyr	Phe	Phe	Leu	Met	Phe	Arg	Tyr	Pro	Met
		180					185						190		
Asp	Leu	Gly	Gly	Arg	Asn	Phe	Leu	Ser	Thr	Pro	Gln	Phe	Leu	Tyr	Arg
	195					200					205				
Trp	Leu	Pro	Ser	Arg	Arg	Gly	Gly	Val	Ser	Gly	Phe	Gly	Val	Pro	Pro
	210					215					220				
Ala	Ser	Met	Arg	Arg	Ala	Ala	Asp	Gln	Asn	Gly	Gly	Gly	Gly	Arg	His
225					230					235				240	
Asn	Trp	Gly	Gln	Gly	Phe	Arg	Leu	Gly	Asp	Gln					
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<210> 3233

<211> 975

<212> DNA

<213> Homo sapiens

<400> 3233

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 120
 atgacaattt tcacatctcc cgcttcccc tccaaagagt tctacttgtc caattctgaa
 180
 aaggaacggt atgaaaaaga attcagccaa gaaagacaac aagaaatttt gagaagagca
 240
 gcaagagctt tacctatcta taccacatca gcttcaaaaa ctatcagata ttgtgaaaaa
 300
 tgtcagctga ttaaacctga tcgggctcat cactgctcag cctgtgactc atgtattctt
 360
 aagatggatc atccctgtcc ttgggtgaat aactgtgtgg gatttttctaa ttacaaattc
 420
 ttctgtctgt ttttattgta ttccctatta tattgccttt tcgtggccgc acagttttag
 480
 agtacttaaa aaatttttga cgaaagaacc gacaaaaacc cgggccaaaa ttccacgtac
 540
 ttttttcttt tctttgtgtc tgcaatgttc ttcacagcg tcctctcact ttccagctac
 600
 cactgctggc tttaaacagc attgtccaca gctccgtctg cagggtcagg gcatggcctc
 660
 tctccgtgtt cctgtgaaga gccttcattg gaatcatccc gggacataca gcttgaatgt
 720
 gctgtctggc tagccccctc acaagtcggt cactctgcac aaggaatccg agagctcatc
 780
 aaggatcagc acggtctggg gccaggtgg ggtggaacac gcacggtcca caagcaattc
 840
 tgtctttctc aaggcttttt cttgtgcagt atgaaatcct tcatatttca tatgaagtat
 900
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 960
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 975

<210> 3234

<211> 159

<212> PRT

<213> Homo sapiens

<400> 3234

Xaa Ala Tyr Val Val Glu Leu Cys Val Phe Thr Ile Phe Gly Asn Glu
 1 5 10 15
 Glu Asn Gly Lys Thr Val Val Tyr Leu Val Ala Phe His Leu Phe Phe
 20 25 30
 Val Met Phe Val Trp Ser Tyr Trp Met Thr Ile Phe Thr Ser Pro Ala
 35 40 45
 Ser Pro Ser Lys Glu Phe Tyr Leu Ser Asn Ser Glu Lys Glu Arg Tyr
 50 55 60
 Glu Lys Glu Phe Ser Gln Glu Arg Gln Gln Glu Ile Leu Arg Arg Ala
 65 70 75 80
 Ala Arg Ala Leu Pro Ile Tyr Thr Thr Ser Ala Ser Lys Thr Ile Arg


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<210> 3235
<211> 551
<212> DNA
<213> Homo sapiens
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<210> 3236
<211> 183
<212> PRT
<213> Homo sapiens
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2439

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Lys Glu Lys Asn Glu Ile Ile Ala Arg Leu Glu Glu Lys Thr Asn Lys					
	100		105		110
Ile Thr Ala Ala Met Arg Gln Leu Glu Gln Arg Leu Gln Gln Ala Glu					
	115		120		125
Lys Ala Gln Met Glu Ala Glu Asp Glu Asp Glu Lys Tyr Leu Gln Glu					
	130		135		140
Cys Leu Ser Lys Ser Asp Ser Leu Gln Lys Gln Ile Ser Gln Lys Glu					
145		150		155	160
Lys Gln Leu Val Gln Leu Glu Thr Asp Leu Lys Ile Glu Lys Glu Trp					
	165		170		175
Arg Gln Thr Leu Gln Glu Asp					
	180				

<210> 3237

<211> 1323

<212> DNA

<213> Homo sapiens

<400> 3237

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cgggcgctgt ggaccatggc tccgcccgcg gcgcctggcc gggaccgtgt gggccgtgag
120
gatgaggacc gttgggaagt acggggggac cgcaaggccc ggaagcccct ggtggagaag
180
aagcgacgcg cgcgatcaa cgagagtctt caggagtgtc ggctgctgct ggcgggcgcc
240
gaggtgcagg ccaagctgga gaacgccgaa gtgctggagc tgacggtgcg gcgggtccag
300
ggtgtgctgc ggggccgggc gcgcgagcgc gacgagctgc aggcggaagc gagcgagcgc
360
ttcgctgccg gctacatcca gtgcatgcac gaggtgcaca cgttcgtgtc cacgtgccag
420
gccatcgacg ctaccgtcgc tgccgagctc ctgaaccatc tgctcgagtc catgccgtg
480
cgtgagggca gcagcttcca ggatctgctg ggggacgccc tggcgggggc acctagagcc
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600
ggtcctgggg acgacctgtg ctccgacctg gaggaggccc ctgaggctga actgagtcag
660
gtcctctgtg aggggcccga cttggtgccc gcagccctgg gcagcctgac cacagcccaa
720
attgcccgga gtgtctggag gccttgggtg ccaatgccag ccagagtcct gcgggggtgg
780
gcccggccct ccctggatct cctccctcct ccagggggtt cagatgtggt ggggtagggc
840
cctggaagtc tcccaggtct tccctccctc ctctgatgga tggcttgagc ggcagccctc
900
ggtaaccagc ccagtcaggc ccagccccg tttcttaaga aacttttagg gaccctgcag
960
ctctggagtg ggtggagggg gggagctacg ggcaggagga agaattttgt agagctgcc
1020

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gcgctctccc aggttcaccc acccaggctt caccagccct gtgcgggctc tgggggcaga
 1080
 ggtggcagaa atggtgctgg gcactagtgt tccaggcagc cctgggctaa acaaaagctt
 1140
 gaacttgcca cttcagcggg gagatgagag gcagggtgcac tcagctgcac tgcccagagc
 1200
 tgtgatgctc tgtacatctt gttttagca cacttgagtt tgtgtattcc attgacatca
 1260
 aatgtgacaa ttttactaaa taaagaattt tggagttagt tacccttgaa aaaaaagtcg
 1320
 acg
 1323

<210> 3238

<211> 249

<212> PRT

<213> Homo sapiens

<400> 3238

Xaa	Leu	Gly	Cys	Asp	Leu	Pro	Arg	Arg	Gly	Val	Cys	Thr	Lys	Ala	Leu
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Gly	Ala	Gly	Leu	Arg	Ala	Leu	Trp	Thr	Met	Ala	Pro	Pro	Ala	Ala	Pro
			20					25					30		
Gly	Arg	Asp	Arg	Val	Gly	Arg	Glu	Asp	Glu	Asp	Arg	Trp	Glu	Val	Arg
		35					40					45			
Gly	Asp	Arg	Lys	Ala	Arg	Lys	Pro	Leu	Val	Glu	Lys	Lys	Arg	Arg	Ala
	50					55					60				
Arg	Ile	Asn	Glu	Ser	Leu	Gln	Glu	Leu	Arg	Leu	Leu	Leu	Ala	Gly	Ala
65					70				75					80	
Glu	Val	Gln	Ala	Lys	Leu	Glu	Asn	Ala	Glu	Val	Leu	Glu	Leu	Thr	Val
				85					90					95	
Arg	Arg	Val	Gln	Gly	Val	Leu	Arg	Gly	Arg	Ala	Arg	Glu	Arg	Glu	Gln
			100					105					110		
Leu	Gln	Ala	Glu	Ala	Ser	Glu	Arg	Phe	Ala	Ala	Gly	Tyr	Ile	Gln	Cys
		115					120					125			
Met	His	Glu	Val	His	Thr	Phe	Val	Ser	Thr	Cys	Gln	Ala	Ile	Asp	Ala
	130					135					140				
Thr	Val	Ala	Ala	Glu	Leu	Leu	Asn	His	Leu	Leu	Glu	Ser	Met	Pro	Leu
145					150					155				160	
Arg	Glu	Gly	Ser	Ser	Phe	Gln	Asp	Leu	Leu	Gly	Asp	Ala	Leu	Ala	Gly
			165					170					175		
Pro	Pro	Arg	Ala	Pro	Gly	Arg	Ser	Gly	Trp	Pro	Ala	Gly	Gly	Ala	Pro
			180					185					190		
Gly	Ser	Pro	Ile	Pro	Ser	Pro	Pro	Gly	Pro	Gly	Asp	Asp	Leu	Cys	Ser
		195				200					205				
Asp	Leu	Glu	Glu	Ala	Pro	Glu	Ala	Glu	Leu	Ser	Gln	Ala	Pro	Ala	Glu
	210					215					220				
Gly	Pro	Asp	Leu	Val	Pro	Ala	Ala	Leu	Gly	Ser	Leu	Thr	Thr	Ala	Gln
225					230					235					240
Ile	Ala	Arg	Ser	Val	Trp	Arg	Pro	Trp							
				245											

<210> 3239

<211> 432

<212> DNA

<213> Homo sapiens

<400> 3239

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aaaaccaaag attctcctgg agttttctct aaactgggtg ttctcctgag gagagtgaca
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120
ggtttgttcc tccttttctt cgttctgcgg gtccgaagca atgtgctaaa ggggtgctatc
180
caggaccgcg taggtctcct ttaccagttt gtgggcgcca ccccgtaac aggcattgctg
240
aacgctgtga atctgtttcc cgtgctgcga gctgtcagcg accaggagag tcaggacggc
300
ctctaccaga agtggcagat gatgctggcc tatgcactgc acgtcctccc cttcagcggt
360
gttgccacca tgattttcag cagtgtgtgc tactggacgc tgggcttaca tcctgaggtt
420
gcccgaattgg gt
432

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<210> 3240

<211> 144

<212> PRT

<213> Homo sapiens

<400> 3240

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Lys Thr Lys Asp Ser Pro Gly Val Phe Ser Lys Leu Gly Val Leu Leu
 1           5           10           15
Arg Arg Val Thr Arg Asn Leu Val Arg Asn Lys Leu Ala Val Ile Thr
      20           25           30
Arg Leu Leu Gln Asn Leu Ile Met Gly Leu Phe Leu Leu Phe Phe Val
      35           40           45
Leu Arg Val Arg Ser Asn Val Leu Lys Gly Ala Ile Gln Asp Arg Val
      50           55           60
Gly Leu Leu Tyr Gln Phe Val Gly Ala Thr Pro Tyr Thr Gly Met Leu
65           70           75           80
Asn Ala Val Asn Leu Phe Pro Val Leu Arg Ala Val Ser Asp Gln Glu
      85           90           95
Ser Gln Asp Gly Leu Tyr Gln Lys Trp Gln Met Met Leu Ala Tyr Ala
      100          105          110
Leu His Val Leu Pro Phe Ser Val Val Ala Thr Met Ile Phe Ser Ser
      115          120          125
Val Cys Tyr Trp Thr Leu Gly Leu His Pro Glu Val Ala Arg Leu Gly
      130          135          140

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<210> 3241

<211> 492

<212> DNA

<213> Homo sapiens

<400> 3241

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gtggaatttt tttagacaaa gtctcaaaaa acaacaaaac aaacaaaagg taagataaat
60

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acgaaatata aaataagagg caggaagagc ccaaagcatc agaaatgtgc cagttataat
 120
 gggccaaaat cccctcttgt gtctccagaa gtatttgaaa aatacgttag gatctgcctc
 180
 acagacatgc tcccaggaca ctcgacagca aggaggtagc gcgggcccag ccagccaagg
 240
 cagaggagga catcactgcc acagcagggg gcctgactgg cagcaaaaagg gacgactccg
 300
 gcgaaaagtc agcaggaaac aggacagggg ctggaccaat ggcctccctc agccccacac
 360
 cccacccagg caggagcggg gcctggccccg gggcaggcgg gtgggagagc tactgagtg
 420
 ggcagcaggg catggcccct gatgctgcag gtaccaggc tgcagctgca gaaacctcag
 480
 tgggaaccca gg
 492

<210> 3242

<211> 107

<212> PRT

<213> Homo sapiens

<400> 3242

Met	Gly	Gln	Asn	Pro	Leu	Leu	Cys	Leu	Gln	Lys	Tyr	Leu	Lys	Asn	Thr
1				5					10					15	
Leu	Gly	Ser	Ala	Ser	Gln	Thr	Cys	Ser	Gln	Asp	Thr	Arg	Gln	Gln	Gly
			20					25					30		
Gly	Thr	Ala	Gly	Pro	Ala	Ser	Gln	Gly	Arg	Gly	Gly	His	His	Cys	His
		35					40					45			
Ser	Arg	Gly	Pro	Asp	Trp	Gln	Gln	Lys	Gly	Arg	Leu	Arg	Arg	Lys	Val
	50					55					60				
Ser	Arg	Lys	Gln	Asp	Arg	Gly	Trp	Thr	Asn	Gly	Leu	Pro	Gln	Pro	His
65				70					75					80	
Thr	Pro	Pro	Arg	Gln	Glu	Arg	Cys	Leu	Ala	Arg	Gly	Arg	Arg	Val	Gly
			85					90						95	
Glu	Leu	Thr	Glu	Trp	Ala	Ala	Gly	His	Gly	Pro					
			100					105							

<210> 3243

<211> 944

<212> DNA

<213> Homo sapiens

<400> 3243

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 ttccccaccc tttgggtctgg ggcaaggagt acttacggag tgacaaaagg aaaagtctgc
 120
 tttgaggcaa aggtaaccca gaatctccca atgaaagaag gctgcacaga ggtctctctc
 180
 cttcgagttg ggtgggtctgt tgatttttcc cgtccacagc ttggtgaaga tgaattctct
 240
 tacggtttcg atggacgagg actcaaggca gaaaatggac aatttgagga atttggccag
 300

actttttgggg agaatgatgt tattggctgc ttgctaatt ttgagactga agaagtagaa
 360
 ctttccttct ccaagaatgg agaagacctt ggtgtggcat tctggatcag caaggattcc
 420
 ctggcagacc gggcccttct accccatgtc ctctgcaaaa attgtgttgt agaattaaac
 480
 ttcggtcaga aggaggagcc cttcttccca ccaccagaag agtttgtgtt cattcatgct
 540
 gtgcctgttg aggagcgtgt acgcactgca gtccctccca agaccataga ggaatgtgag
 600
 gtgattctga tgggtgggact acccggtatct ggaaagacct agtgggcact gaaatatgca
 660
 aaagaaaacc ctgagaaaag atacaatgtc ctgggagctg agactgtgct caatcaaagt
 720
 aggatgaagg gtctcgagga gccagagatg gaccccaaaa gccgagacct tttagttcag
 780
 caagcctccc agtgccttag taagctggtc cagattgctt cccggacaaa gaggaacttt
 840
 attcttgatc agtgtaatgt gtacaattct ggccaacggc ggaagctatt gctgttcaag
 900
 accttctctc ggaaagtggg ggtggttgtc cctaagtagg aaga
 944

<210> 3244

<211> 314

<212> PRT

<213> Homo sapiens

<400> 3244

Asp	Leu	His	Phe	Gln	Val	Ser	Lys	Asp	Arg	Tyr	Gly	Gly	Gln	Pro	Leu
1				5				10						15	
Phe	Ser	Glu	Lys	Phe	Pro	Thr	Leu	Trp	Ser	Gly	Ala	Arg	Ser	Thr	Tyr
			20					25					30		
Gly	Val	Thr	Lys	Gly	Lys	Val	Cys	Phe	Glu	Ala	Lys	Val	Thr	Gln	Asn
			35				40					45			
Leu	Pro	Met	Lys	Glu	Gly	Cys	Thr	Glu	Val	Ser	Leu	Leu	Arg	Val	Gly
			50			55					60				
Trp	Ser	Val	Asp	Phe	Ser	Arg	Pro	Gln	Leu	Gly	Glu	Asp	Glu	Phe	Ser
65					70					75				80	
Tyr	Gly	Phe	Asp	Gly	Arg	Gly	Leu	Lys	Ala	Glu	Asn	Gly	Gln	Phe	Glu
			85						90					95	
Glu	Phe	Gly	Gln	Thr	Phe	Gly	Glu	Asn	Asp	Val	Ile	Gly	Cys	Phe	Ala
			100					105					110		
Asn	Phe	Glu	Thr	Glu	Glu	Val	Glu	Leu	Ser	Phe	Ser	Lys	Asn	Gly	Glu
			115				120					125			
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Ala	Leu	Leu	Pro	His	Val	Leu	Cys	Lys	Asn	Cys	Val	Val	Glu	Leu	Asn
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Phe	Ile	His	Ala	Val	Pro	Val	Glu	Glu	Arg	Val	Arg	Thr	Ala	Val	Pro
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Pro	Lys	Thr	Ile	Glu	Glu	Cys	Glu	Val	Ile	Leu	Met	Val	Gly	Leu	Pro

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Gly	Ser Gly Lys Thr Gln Trp	Ala Leu Lys Tyr	Ala Lys Glu Asn Pro			
	210	215	220			
Glu	Lys Arg Tyr Asn Val Leu Gly	Ala Glu Thr Val Leu Asn Gln Met				
225		230	235		240	
Arg	Met Lys Gly Leu Glu Glu Pro	Glu Met Asp Pro Lys Ser Arg Asp				
	245	250	255			
Leu	Leu Val Gln Gln Ala Ser Gln	Cys Leu Ser Lys Leu Val Gln Ile				
	260	265	270			
Ala	Ser Arg Thr Lys Arg Asn Phe	Ile Leu Asp Gln Cys Asn Val Tyr				
	275	280	285			
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<212> DNA

<213> Homo sapiens

<400> 3245

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<212> PRT

<213> Homo sapiens

<400> 3248

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	210					215						220			
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<211> 4487

<212> DNA

<213> Homo sapiens

<400> 3249

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<212> PRT

<213> Homo sapiens

<400> 3250

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Gln	Pro	Ser	Pro	Ser	Ser	Ser	Phe	Asn	Glu	Gly	Leu	Leu	Thr	Gly	Gly		
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His	Arg	His	Gln	Glu	Met	Glu	Ser	Arg	Leu	Lys	Val	Leu	His	Ala	Gln		
				690				695				700					
Ile	Leu	Glu	Lys	Asp	Ala	Val	Ile	Lys	Val	Leu	Gln	Gln	Arg	Ser	Arg		
705					710					715					720		
Arg	Asp	Pro	Gly	Lys	Ala	Ile	Gln	Gly	Ser	Leu	Arg	Pro	Ala	Lys	Ser		
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Val	Pro	Ser	Val	Phe	Ala	Ala	Ala	Ala	Ala	Gly	Thr	Gln	Gly	Trp	Gln		
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Gly	Leu	Ser	Ser	Ser	Glu	Arg	Gln	Thr	Ala	Asp	Ala	Pro	Ala	Arg	Leu		

	755					760					765						
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	770					775					780						
Pro	Ala	Ala	His	Ala	Lys	His	Gly	Ser	Arg	Asp	Gly	Ser	Thr	Gln	Thr		
785					790					795					800		
Asp	Gly	Pro	Pro	Asp	Ser	Thr	Ser	Thr	Cys	Leu	Pro	Pro	Glu	Pro	Asp		
				805					810					815			
Ser	Leu	Leu	Gly	Cys	Ser	Ser	Ser	Gln	Arg	Ala	Ala	Ser	Leu	Asp	Ser		
			820					825					830				
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<210> 3251

<211> 2595

<212> DNA

<213> Homo sapiens

<400> 3251

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 <211> 254
 <212> PRT
 <213> Homo sapiens

<400> 3252
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 35 40 45
 Leu Glu Asp Val Ser Arg Gly Gly Ser Pro Phe Ala Ile Val Ile Thr
 50 55 60
 Gln Gln His Gln Ile His Arg Ser Cys Thr Val Asn Ile Met Phe Gly
 65 70 75 80
 Thr Pro Gln Glu His Arg Asn Met Pro Gln Ala Asp Ala Met Val Leu
 85 90 95
 Val Ala Arg Asn Tyr Glu Arg Tyr Lys Asn Glu Cys Arg Glu Lys Glu
 100 105 110
 Arg Glu Glu Ile Ala Arg Gln Ala Ala Lys Met Ala Asp Glu Ala Ile
 115 120 125
 Leu Gln Glu Arg Glu Arg Gly Gly Pro Glu Glu Gly Val Arg Gly Gly
 130 135 140
 His Pro Pro Ala Ile Gln Ser Leu Ile Asn Leu Leu Ala Asp Asn Arg
 145 150 155 160
 Tyr Leu Thr Ala Glu Glu Thr Asp Lys Ile Ile Asn Tyr Leu Arg Glu
 165 170 175
 Arg Lys Glu Arg Leu Met Arg Ser Ser Thr Asp Ser Leu Pro Gly Glu
 180 185 190
 Leu Arg Gly Arg Pro Arg Pro Asp Phe Pro Pro Thr Thr Arg Gly Asp
 195 200 205
 Leu Gly Cys Leu Ala Glu Asp Thr Ala Lys Leu Pro Thr Ala Pro Glu
 210 215 220
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 <211> 686
 <212> DNA
 <213> Homo sapiens

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 240

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<210> 3254

<211> 180

<212> PRT

<213> Homo sapiens

<400> 3254

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Tyr	Gln	Ser	Ser	His	Met	Val	Asp	Tyr	Gln	Pro	Tyr	Arg	Lys	His	Lys
			20					25					30		
Tyr	Ser	Arg	Val	Thr	Pro	Gln	Glu	Gln	Ala	Lys	Leu	Asp	Ala	Gln	Leu
		35				40						45			
Arg	Asp	Lys	Glu	Phe	Tyr	Arg	Pro	Ile	Pro	Asn	Pro	Asn	Pro	Lys	Leu
	50					55					60				
Thr	Asp	Gly	Tyr	Pro	Ala	Phe	Lys	Arg	Pro	His	Met	Thr	Ala	Lys	Asp
65					70					75				80	
Leu	Gly	Leu	Pro	Gly	Phe	Phe	Pro	Ser	Gln	Glu	His	Glu	Ala	Thr	Arg
			85					90						95	
Glu	Asp	Glu	Arg	Lys	Phe	Thr	Ser	Thr	Cys	His	Phe	Thr	Tyr	Pro	Ala
			100				105						110		
Ser	His	Asp	Leu	His	Leu	Ala	Gln	Gly	Asp	Pro	Asn	Gln	Val	Leu	Gln
	115						120					125			
Ser	Ala	Asp	Phe	Pro	Cys	Leu	Val	Asp	Pro	Lys	His	Gln	Pro	Ala	Ala
	130					135					140				
Glu	Met	Ala	Lys	Gly	Tyr	Leu	Leu	Leu	Pro	Gly	Cys	Pro	Cys	Leu	His
145				150					155					160	
Cys	His	Ile	Val	Lys	Val	Pro	Ile	Leu	Asn	Arg	Trp	Gly	Pro	Leu	Met
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Pro	Phe	Tyr	Gln												
			180												

<210> 3255

<211> 724

<212> DNA

<213> Homo sapiens

<400> 3255

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 180
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 240
 atcttgccgg acacatcaca gctagccgcg aatcccgaag ggtcagcaga gcctagaaag
 300
 gaatatgagg ggggtcggaa tgaggcaggc gaaaggcacg gacgtgggag ggcacggcta
 360
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 420
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 480
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 540
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 600
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 660
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<210> 3256

<211> 169

<212> PRT

<213> Homo sapiens

<400> 3256

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			20					25					30		
Gly	Arg	Asn	Glu	Ala	Gly	Glu	Arg	His	Gly	Arg	Gly	Arg	Ala	Arg	Leu
		35					40					45			
Pro	Asn	Gly	Asp	Thr	Tyr	Glu	Gly	Ser	Tyr	Glu	Phe	Gly	Lys	Arg	His
		50				55					60				
Gly	Gln	Gly	Ile	Tyr	Lys	Phe	Lys	Asn	Gly	Ala	Arg	Tyr	Ile	Gly	Glu
65				70					75					80	
Tyr	Val	Arg	Asn	Lys	Lys	His	Gly	Gln	Gly	Thr	Phe	Ile	Tyr	Pro	Asp
			85					90					95		
Gly	Ser	Arg	Tyr	Glu	Gly	Glu	Trp	Ala	Asn	Asp	Leu	Arg	His	Gly	His
			100					105					110		
Gly	Val	Tyr	Tyr	Tyr	Ile	Asn	Asn	Asp	Thr	Tyr	Thr	Gly	Glu	Trp	Phe
		115				120						125			
Ala	His	Gln	Arg	His	Gly	Gln	Gly	Thr	Tyr	Leu	Tyr	Ala	Glu	Thr	Gly
		130				135						140			
Ser	Lys	Tyr	Val	Gly	Thr	Trp	Val	Asn	Gly	Gln	Gln	Glu	Gly	Thr	Ala
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165

<210> 3257

<211> 368

<212> DNA

<213> Homo sapiens

<400> 3257

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240
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368

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<210> 3258

<211> 122

<212> PRT

<213> Homo sapiens

<400> 3258

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Pro	Thr	Phe	Ser	Arg	Ser	Pro	His	His	Tyr	Tyr	Arg	Ser	Gly	Asp	Leu
			20					25					30		
Ser	Thr	Ala	Thr	Lys	Ser	Glu	Thr	Ser	Glu	Asp	Ile	Ser	Gln	Thr	Ser
		35					40					45			
Lys	Tyr	Ser	Pro	Ile	Tyr	Ser	Pro	Asp	Pro	Tyr	Tyr	Ala	Ser	Glu	Ser
	50					55					60				
Glu	Tyr	Trp	Thr	Tyr	His	Gly	Ser	Pro	Lys	Val	Pro	Arg	Ala	Arg	Arg
65					70					75				80	
Phe	Ser	Ser	Gly	Gly	Glu	Glu	Asp	Asp	Phe	Asp	Arg	Ser	Met	His	Lys
			85						90					95	
Leu	Gln	Ser	Gly	Ile	Gly	Arg	Leu	Ile	Leu	Lys	Glu	Glu	Met	Lys	Ala
			100					105					110		
Arg	Ser	Ser	Ser	Tyr	Ala	Asp	Pro	Trp	Arg						
			115					120							

<210> 3259

<211> 747

<212> DNA

<213> Homo sapiens

<400> 3259

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<210> 3260

<211> 197

<212> PRT

<213> Homo sapiens

<400> 3260

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			20					25					30		
Gly	Ser	Glu	Val	Asp	Arg	Val	Ile	Leu	Lys	Ala	Asn	Glu	Thr	Phe	Ala
		35					40					45			
Phe	Val	Gly	Asn	Val	Thr	His	Tyr	Ala	Gln	Val	Trp	Leu	Asn	Ile	Ser
	50					55					60				
Ala	Glu	Ile	Arg	Ser	Phe	Leu	Glu	Gln	Gly	Arg	Leu	Gln	Gln	His	Leu
65					70				75					80	
Arg	Trp	Leu	Gln	Gln	Tyr	Val	Ala	Glu	Leu	Arg	Leu	His	Pro	Glu	Ala
			85					90						95	
Leu	Asn	Leu	Ser	Leu	Asp	Glu	Leu	Pro	Pro	Ala	Leu	Arg	Gln	Asp	Asn
		100						105					110		
Phe	Ser	Leu	Pro	Ser	Gly	Met	Ala	Leu	Leu	Gln	Gln	Leu	Asp	Thr	Ile
		115					120					125			
Asp	Asn	Ala	Ala	Cys	Gly	Trp	Ile	Gln	Phe	Met	Ser	Lys	Val	Ser	Val
	130					135					140				
Asp	Ile	Phe	Lys	Gly	Phe	Pro	Asp	Glu	Glu	Ser	Ile	Val	Asn	Tyr	Thr
145					150					155				160	
Leu	Asn	Gln	Ala	Tyr	Gln	Asp	Asn	Val	Thr	Val	Phe	Ala	Ser	Val	Ile
			165					170						175	
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 <211> 1323
 <212> DNA
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 <400> 3261
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1323

<210> 3262
<211> 81
<212> PRT
<213> Homo sapiens

<400> 3262
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35 40 45
Pro Asp Leu Pro Ser Pro Pro Met Glu Ala Pro Ala Pro Ala Ser Asn
50 55 60
Pro Ser Gly Arg Lys Lys Pro Glu Arg Ser Glu Asp Ala Leu Phe Ala
65 70 75 80
Leu

<210> 3263
<211> 1128
<212> DNA
<213> Homo sapiens

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180
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240
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360
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420
ggaaccctgc aggtgacctc tcagatcctc cagaagaaca cagacgtggt ggccaccttg
480
aagaagattc gccgttacaa agcgaacaag gacgtaatgg agaaggcagc agaagtctat
540
accggctca agtcgcgggt cctcggccca aagatcgagg cggatgcagaa agtgaacaag
600
gctgggatgg agaaggagaa ggccgaggag aagctggccg gggaggagct ggccggggag
660
gaggcccccc aggagaaggc ggaggacaag ccagcaccg atctctcagc cccagtgaat
720
ggcgaggcca catcacagaa gggggagagc gcagaggaca aggagcacga ggagggtcgg
780

gactcggagg aggggccaag gtgtggctcc tctgaagacc tgcacgacag cgtacgggag
 840
 ggtcccgacc tggacaggcc tgggagcgac cggcaggagc gcgagagggc acggggggac
 900
 tcggaggccc tggacgagga gagctgagcc gcgggcagcc aggcccagcc cccgcccag
 960
 ctcaggctgc ccctctcctt ccccggtctg caggagagca gagcagagaa ctgtggggaa
 1020
 cgctgtgctg tttgtatttg ttcccttggg ttttttttct ctgcctaatt tctgtgattt
 1080
 ccaaccaaca tgaaatgact ataaatggtt tttttaatga aaaaaaaaa
 1128

<210> 3264

<211> 308

<212> PRT

<213> Homo sapiens

<400> 3264

Ser	Arg	Tyr	Arg	Arg	Ser	Ser	Gly	Asp	Glu	Leu	Arg	Glu	Asp	Asp	Glu
1				5					10					15	
Pro	Val	Lys	Lys	Arg	Gly	Arg	Lys	Gly	Arg	Gly	Arg	Gly	Pro	Pro	Ser
			20					25					30		
Ser	Ser	Asp	Ser	Glu	Pro	Glu	Ala	Glu	Leu	Glu	Arg	Glu	Ala	Lys	Lys
		35					40					45			
Ser	Ala	Lys	Lys	Pro	Gln	Ser	Ser	Ser	Thr	Glu	Pro	Ala	Arg	Lys	Pro
	50					55					60				
Gly	Gln	Lys	Glu	Lys	Arg	Val	Arg	Pro	Glu	Glu	Lys	Gln	Gln	Ala	Lys
65					70					75					80
Pro	Val	Lys	Val	Glu	Arg	Thr	Arg	Lys	Arg	Ser	Glu	Gly	Phe	Ser	Met
				85					90					95	
Asp	Arg	Lys	Val	Glu	Lys	Lys	Lys	Glu	Pro	Ser	Val	Glu	Glu	Lys	Leu
			100					105					110		
Gln	Lys	Leu	His	Ser	Glu	Ile	Lys	Phe	Ala	Leu	Lys	Val	Asp	Ser	Pro
		115					120						125		
Asp	Val	Lys	Gly	Cys	Leu	Asn	Ala	Leu	Glu	Glu	Leu	Gly	Thr	Leu	Gln
	130					135					140				
Val	Thr	Ser	Gln	Ile	Leu	Gln	Lys	Asn	Thr	Asp	Val	Val	Ala	Thr	Leu
145					150					155					160
Lys	Lys	Ile	Arg	Arg	Tyr	Lys	Ala	Asn	Lys	Asp	Val	Met	Glu	Lys	Ala
				165					170					175	
Ala	Glu	Val	Tyr	Thr	Arg	Leu	Lys	Ser	Arg	Val	Leu	Gly	Pro	Lys	Ile
			180					185					190		
Glu	Ala	Val	Gln	Lys	Val	Asn	Lys	Ala	Gly	Met	Glu	Lys	Glu	Lys	Ala
		195					200					205			
Glu	Glu	Lys	Leu	Ala	Gly	Glu	Glu	Leu	Ala	Gly	Glu	Glu	Ala	Pro	Gln
	210					215					220				
Glu	Lys	Ala	Glu	Asp	Lys	Pro	Ser	Thr	Asp	Leu	Ser	Ala	Pro	Val	Asn
225					230					235					240
Gly	Glu	Ala	Thr	Ser	Gln	Lys	Gly	Glu	Ser	Ala	Glu	Asp	Lys	Glu	His
				245					250					255	
Glu	Glu	Gly	Arg	Asp	Ser	Glu	Glu	Gly	Pro	Arg	Cys	Gly	Ser	Ser	Glu
			260					265					270		
Asp	Leu	His	Asp	Ser	Val	Arg	Glu	Gly	Pro	Asp	Leu	Asp	Arg	Pro	Gly


```

          275              280              285
Ser Asp Arg Gln Glu Arg Glu Arg Ala Arg Gly Asp Ser Glu Ala Leu
          290              295              300
Asp Glu Glu Ser
305

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<210> 3265
<211> 524
<212> DNA
<213> Homo sapiens
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<400> 3265
tcatgacagt gtggctcctct gaagatttgt tcagactccc tggaactggt ctttgtggtc
60
ctttttcgtg gttttcaaaa tgtttcatt gagggcgtat tactttttata atcaacaaaa
120
gagaaagtat aacttcattt tagaaattct cacctaaggc atttgaaaaa taatccaaaa
180
ggtacattat tgttgatttt tcttccttct agaaaggatc ttgttcgagt agaagccaca
240
gtcattgaaa agacagaatc atggccaaga atcattatga gattcaggaa aaggaaaaac
300
ttcaagaaga aaagaagtaa gttagagaaa gtaccgctgg gccctggtgc acggtgctgg
360
ttgcccaggc gcatgcggac ggagggtgtg gggcacgtgg gtctcgggac aggaagccca
420
ggcaggtctc aacctggctg ccactgccca cttgccacc tcatcctaga gggagcacc
480
agaggggtcca gcctcgctcc ccttctctc cacgctccac gcgt
524

```

```
<210> 3266
<211> 82
<212> PRT
<213> Homo sapiens
```

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<400> 3266
Met Arg Phe Arg Lys Arg Lys Asn Phe Lys Lys Lys Arg Ser Lys Leu
  1             5             10             15
Glu Lys Val Pro Leu Gly Pro Val Ala Arg Cys Trp Leu Pro Arg Arg
      20             25             30
Met Arg Thr Glu Gly Val Gly His Val Gly Leu Gly Thr Gly Ser Pro
      35             40             45
Gly Arg Ser Gln Pro Gly Cys His Cys Pro Leu Ala Thr Leu Ile Leu
      50             55             60
Glu Gly Ala Pro Arg Gly Ser Ser Leu Ala Pro Leu Leu Leu His Ala
 65             70             75             80
Pro Arg

```

```
<210> 3267
<211> 393
<212> DNA
<213> Homo sapiens
```

<400> 3267

gtcgaatatg catgcagagt acagggttta gaacatgaca tggaagagat caatgctcga
 60
 tggaatacat tgaataaaaa ggtcgcacaa agaattgcac agctacagga agctttgttg
 120
 cattgtggga agtttcaaga tgccttggag ccattgctca gctgggtggc agataccgag
 180
 gagctcatag ccaatcagaa acctccatct gctgagtata aagtggtgaa agcacagatc
 240
 caagaacaga agttgctcca gcggctccta gatgatcgaa aggccacagt agacatgctt
 300
 caagcagaag gaggcagaat agcccagtca gcagagctgg ctgatagaga gaaaatcact
 360
 ggacagctgg agagtcttga aagtagatgg act
 393

<210> 3268

<211> 131

<212> PRT

<213> Homo sapiens

<400> 3268

Val	Glu	Tyr	Ala	Cys	Arg	Val	Gln	Gly	Leu	Glu	His	Asp	Met	Glu	Glu
1				5				10						15	
Ile	Asn	Ala	Arg	Trp	Asn	Thr	Leu	Asn	Lys	Lys	Val	Ala	Gln	Arg	Ile
			20				25						30		
Ala	Gln	Leu	Gln	Glu	Ala	Leu	Leu	His	Cys	Gly	Lys	Phe	Gln	Asp	Ala
		35				40						45			
Leu	Glu	Pro	Leu	Leu	Ser	Trp	Leu	Ala	Asp	Thr	Glu	Glu	Leu	Ile	Ala
	50				55					60					
Asn	Gln	Lys	Pro	Pro	Ser	Ala	Glu	Tyr	Lys	Val	Val	Lys	Ala	Gln	Ile
65				70					75					80	
Gln	Glu	Gln	Lys	Leu	Leu	Gln	Arg	Leu	Leu	Asp	Asp	Arg	Lys	Ala	Thr
			85				90							95	
Val	Asp	Met	Leu	Gln	Ala	Glu	Gly	Gly	Arg	Ile	Ala	Gln	Ser	Ala	Glu
		100					105						110		
Leu	Ala	Asp	Arg	Glu	Lys	Ile	Thr	Gly	Gln	Leu	Glu	Ser	Leu	Glu	Ser
		115				120						125			
Arg	Trp	Thr													
		130													

<210> 3269

<211> 1423

<212> DNA

<213> Homo sapiens

<400> 3269

ctgtatcaaa aataatagta acttttttgaa tatacacaat ttatctagaa tctattttcc
 60
 tttgaagctg taacttttatg agcgattatt tactaccttt gagaaatgtg ttttagtata
 120
 aaatatagga tgtggaagcg aaaaaatatc tgggtagcaa gtgaggtgta ctcaaaaata
 180

agcaaaagtc acgtgggtct gattttatac cctcgctgga aagcttggtc tcagacacac
 240
 tgttactgca agtgtgtgtg agggggaaac tctcacacac tttgcagttg aggacagggc
 300
 tagactttga ggtggaccct ggctcccagg gctgtgtact cccagcccggt gtttctcttt
 360
 tgctcagact gaacaagtgg aacgaaatta cattaaagaa aagaaggcag cagtgaagaa
 420
 atttgaagac aagaagggtg agctgaaaga gaacctgatt gctgagctag aagaaaagaa
 480
 gaaaatgatt gaaaacgaaa tgctgacaat ggaactgaat ggagattcta tggagggtgaa
 540
 acctatcatg accagaaagt tgcggaggcg accaaatgat ccggtcccca tcccagacaa
 600
 gaggaggaaa cctgctccag cccagctaaa ctatttggtta acagatgaac agatcatgga
 660
 ggatctgaga acattaaata agcttaagtc acccaagaga ccagcatctc catcctctcc
 720
 tgagcacttg cctgcaacac ccgcggaatc tccagcacag agatttgagg cgcggataga
 780
 agatggcaaa ctgtattatg acaaaagatg gtaccacaag agccaggcca tctatctgga
 840
 gtcaaaggac aaccagaaac tgagctgcgt gatcagttct gtaggagcca atgagatctg
 900
 ggtgaggaag acaagtgaca gcaccaagat gaggatctac ctgggtcagc ttcagcgcgg
 960
 gctcttcgtg atccgcggc gctcagctgc ttgactttct acagtgtctt tctcttgacc
 1020
 ctttttctgg agtgggtttt atttttgttt tgtttcgttt tctccttaat agaaaaatgt
 1080
 taacttactg ggaatagcta ctcagccttg gaaatggaga gcactgcagt gaattcttta
 1140
 gggcactttt gtggcgggat gcttccaact ttgtcagttt tttctgcctc aacttcttcc
 1200
 agacatcagt caccatgaga ctgttttact ttcaggcgta ttgggggggtt tgatttactt
 1260
 tccttttatt tctttatttt ttgcttatac ttgtttttga aaacctctc tgagtttgaa
 1320
 gggacagcta tttttattga ttatctttta gtctctctac catggagaag agcaggaagg
 1380
 gatacactct ccagtgcatt ttcatgtttt gaatcggatt agt
 1423

<210> 3270

<211> 169

<212> PRT

<213> Homo sapiens

<400> 3270

Met	Ile	Glu	Asn	Glu	Met	Leu	Thr	Met	Glu	Leu	Asn	Gly	Asp	Ser	Met
1				5					10					15	
Glu	Val	Lys	Pro	Ile	Met	Thr	Arg	Lys	Leu	Arg	Arg	Arg	Pro	Asn	Asp
			20					25					30		
Pro	Val	Pro	Ile	Pro	Asp	Lys	Arg	Arg	Lys	Pro	Ala	Pro	Ala	Gln	Leu

```

          35          40          45
Asn Tyr Leu Leu Thr Asp Glu Gln Ile Met Glu Asp Leu Arg Thr Leu
  50          55          60
Asn Lys Leu Lys Ser Pro Lys Arg Pro Ala Ser Pro Ser Ser Pro Glu
  65          70          75          80
His Leu Pro Ala Thr Pro Ala Glu Ser Pro Ala Gln Arg Phe Glu Ala
          85          90          95
Arg Ile Glu Asp Gly Lys Leu Tyr Tyr Asp Lys Arg Trp Tyr His Lys
          100          105          110
Ser Gln Ala Ile Tyr Leu Glu Ser Lys Asp Asn Gln Lys Leu Ser Cys
          115          120          125
Val Ile Ser Ser Val Gly Ala Asn Glu Ile Trp Val Arg Lys Thr Ser
          130          135          140
Asp Ser Thr Lys Met Arg Ile Tyr Leu Gly Gln Leu Gln Arg Gly Leu
  145          150          155          160
Phe Val Ile Arg Arg Arg Ser Ala Ala
          165

```

<210> 3271

<211> 464

<212> DNA

<213> Homo sapiens

<400> 3271

```

tcatgagcag ggccaattc tggcttctct gtggctcgcca tccatgtgct gggcgctcact
  60
gaaggcactg gggatacagc cgagcacaag atggacagag atccctggcc cctcggagca
  120
ggcagtctgt ggctctggcc cctccagttc cttgtcacca ggagataggc aatgcagctg
  180
atgagaaggg ccccggcagc aagagatcca atgatggtgg ccgccaggat cccagcgttg
  240
gtgggcaggt gtgtactggg cagctcctta ttcttttcag ctacctggac ctcagtcttg
  300
gccttcatag tccattcaga gttgatggta atggctactt ggtaggtgcc actgtctgta
  360
ggctgggcgc ggcgcagcag catggaacca ttggggaagc ccacgatgtc tcgctgtccc
  420
atggcactgc catccctctg aggccgttgt atccccaggg atgt
  464

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<210> 3272

<211> 140

<212> PRT

<213> Homo sapiens

<400> 3272

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Met Gly Gln Arg Asp Ile Val Gly Phe Pro Asn Gly Ser Met Leu Leu
  1          5          10          15
Arg Arg Ala Gln Pro Thr Asp Ser Gly Thr Tyr Gln Val Ala Ile Thr
          20          25          30
Ile Asn Ser Glu Trp Thr Met Lys Ala Lys Thr Glu Val Gln Val Ala
          35          40          45
Glu Lys Asn Lys Glu Leu Pro Ser Thr His Leu Pro Thr Asn Ala Gly

```

50		55		60
Ile Leu Ala Ala Thr	Ile Ile Gly Ser Leu Ala	Gly Ala Leu Leu		
65	70	75	80	
Ile Ser Cys Ile	Ala Tyr Leu Leu Val Thr	Arg Asn Trp Arg	Gly Gln	
	85	90	95	
Ser His Arg Leu	Pro Ala Pro Arg Gly	Gln Gly Ser Leu	Ser Ile Leu	
	100	105	110	
Cys Ser Ala Val	Ser Pro Val Pro Ser	Val Thr Pro Ser	Thr Trp Met	
	115	120	125	
Ala Thr Thr Glu	Lys Pro Glu Leu Gly	Pro Ala His		
130	135	140		

<210> 3273

<211> 387

<212> DNA

<213> Homo sapiens

<400> 3273

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ngcgcgccag ggatggaaaa ctttattctg tatgaggaga tcggaagagg aagcaagact
60
gttgtctata aagggcgacg gaagggaaca atcaattttg tagccattct ttgtactgat
120
aagtgcagaa ggctgaaat aaccaactgg gtccgtctca cccgtgaaat aaaacacaag
180
aatattgtaa cttttcatga atggtatgaa acaagcaacc acctctggct agtgggtggaa
240
ctccgcacag gtggttcctt aaaaacagtt attgctcaag atgaaaacct cccagaagat
300
gttgtgagag aatttgaat tgacctgatt agtggattac atcatcttca taaacttggc
360
attctctttg tgacatttct cctagga
387

```

<210> 3274

<211> 129

<212> PRT

<213> Homo sapiens

<400> 3274

Xaa Ala Pro Gly Met Glu Asn Phe Ile Leu Tyr Glu Glu Ile Gly Arg
1 5 10 15
Gly Ser Lys Thr Val Val Tyr Lys Gly Arg Arg Lys Gly Thr Ile Asn
20 25 30
Phe Val Ala Ile Leu Cys Thr Asp Lys Cys Arg Arg Pro Glu Ile Thr
35 40 45
Asn Trp Val Arg Leu Thr Arg Glu Ile Lys His Lys Asn Ile Val Thr
50 55 60
Phe His Glu Trp Tyr Glu Thr Ser Asn His Leu Trp Leu Val Val Glu
65 70 75 80
Leu Arg Thr Gly Gly Ser Leu Lys Thr Val Ile Ala Gln Asp Glu Asn
85 90 95
Leu Pro Glu Asp Val Val Arg Glu Phe Gly Ile Asp Leu Ile Ser Gly
100 105 110
Leu His His Leu His Lys Leu Gly Ile Leu Phe Val Thr Phe Leu Leu

115 120 125
 Gly

 <210> 3275
 <211> 1266
 <212> DNA
 <213> Homo sapiens

 <400> 3275
 ttttttttaa tcagttaaga ttcttggtga cacaaattgt tttacatcaa ctggtgttat
 60
 agaacacatg aaaggaatac atggggaaga aataaagtag aaccaagag ttcttttaag
 120
 ttttctttta tagagacatg aataacagat acactgaagt ataaacaaaa attggcctga
 180
 agcgtccggt ggccggctta gttaggagct atggctaaac atcatcctga tttgatcttt
 240
 tgccgcaagc aggctggtgt tgccatcggg agactgtgtg aaaaatgtga tggcaagtgt
 300
 gtgatttggt actcctatgt gcgtccctgc actctggtgc gcatatgtga tgagtgtaac
 360
 tatggatctt accaggggag ctgtgtgatc tgtggaggac ctgggggtctc tgatgcctat
 420
 tattgtaagg agtgcaccat ccaggagaag gacagagatg gctgccccaa gattgtcaat
 480
 ctggggagct ctaagacaga cctcttctat gaacgcaaaa aatacggctt caagaagagg
 540
 tgattgggtg gtggccccct cctcccccca acatcagtct gctgcagctg ccagaaaaca
 600
 tgcctactac taccagcaga aaggagagc agcccagagc atcaccagga gtgcctgcta
 660
 gtgtactggc agcttgccac cccctcctct cccttcaccc agacacgtgg tagggatgga
 720
 aaaggattct tcacagagca ctctggcaca ccatatcgga gaaaaattga tagattagtt
 780
 aatggttttt cttgaattcg agaagcatag atctgttctc catattggta tgttctccct
 840
 caaccaagat cttctaaaaa gaaataatat tttagtcttc tgcttgagga actgactgtg
 900
 aagcgacgcc cagtgaaaaa catgatcttg cagcagctct ggtggcagct gtccttgagg
 960
 aaccttttgt gtgtggtggg aagctatcag aacaagaaat gtaggcattt cccgtttttt
 1020
 ttgggggggg ggtggggggg cagggtctct ccctcttgaa aggcatttac ttgtttaaca
 1080
 cttgtccagc tacagtgggg tacagtagct ggctattcac aggcattcac atagcccact
 1140
 agtctcatat ttttttctt ttgagaaatt ggaaactctt tctgttgcta ttatattaat
 1200
 aaagtgtgtg tttattttct ggtaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa
 1260
 aaaaaa
 1266

<210> 3276
 <211> 110
 <212> PRT
 <213> Homo sapiens

<400> 3276
 Met Ala Lys His His Pro Asp Leu Ile Phe Cys Arg Lys Gln Ala Gly
 1 5 10 15
 Val Ala Ile Gly Arg Leu Cys Glu Lys Cys Asp Gly Lys Cys Val Ile
 20 25 30
 Cys Asp Ser Tyr Val Arg Pro Cys Thr Leu Val Arg Ile Cys Asp Glu
 35 40 45
 Cys Asn Tyr Gly Ser Tyr Gln Gly Arg Cys Val Ile Cys Gly Gly Pro
 50 55 60
 Gly Val Ser Asp Ala Tyr Tyr Cys Lys Glu Cys Thr Ile Gln Glu Lys
 65 70 75 80
 Asp Arg Asp Gly Cys Pro Lys Ile Val Asn Leu Gly Ser Ser Lys Thr
 85 90 95
 Asp Leu Phe Tyr Glu Arg Lys Lys Tyr Gly Phe Lys Lys Arg
 100 105 110

<210> 3277
 <211> 1435
 <212> DNA
 <213> Homo sapiens

<400> 3277
 ncctccgtct ccgagaacaa caacaacagc aacaagaaaa caacaataaa aaaaataagg
 60
 ctgcgtggga ggcagaaaga gctaattgcg ccacgcttgt ccctcggcca ccgtcccacc
 120
 cagacttccg tctccttaaa atgttcatgc gtaagtgcgt ggcagaagcg gctcaagcgc
 180
 actcgtgcgt cattgctgtc agggccgagg gagcgggtgca aggcgcgcgc gtgacgtcag
 240
 gacgccgcgg tcaggacgtc gaagccaaag aagaccagag ccagccgggt ggcacagcgg
 300
 tgtcgtggcc gtgttgctga tcgcctgggt gggtgttggtc gtgtccctgc agcgaaggat
 360
 cctgggtggc agtgaaaaag cagtctggct cccgaggtcc accccttata cccaaggctc
 420
 cagatggcgg ccaacgtggg tgatcaacgt agcacagatt ggtcttctca gtacagcatg
 480
 gtggctgggg caggccgaga gaatggcatg gagacgccga tgcacgagaa cccggagtgg
 540
 gagaaggccc gtcaggccct ggccagcatc agcaagtcag gagctgccgg cggctctgcc
 600
 aagtccagca gcaatgggccc tgtggccagt gcaagtacgt gtcccaggca gaagcctcag
 660
 ctttgcagca gcagcagtac taccagtggg accagcagta caactatgcc tacccttaca
 720
 gctactacta tcccatgagc atgtaccaga gctatggctc cccttcccag tatgggatgg
 780

ccggctccta tggctagcca caccacagca gccatccgca cccaacacc aagggactct
 840
 gaaccagccc ccagtccccg gcatggatga gagcatgtcc taccaggctc cccctcagca
 900
 gctgccgtcg gctcagcccc ctcagccctc aaatccccc catggggctc acacgctgaa
 960
 cagtggccct cagcctggga cagctccagc cacacagcan ncagccaggc ggggcccgcc
 1020
 acgggccagg cctatgggcc acacacctac accgaacctg ccaagcccaa gaagggccaa
 1080
 cagctgtgga accgcatgaa acccgcccct gggactggag gttcaagtcc aacatccaga
 1140
 agcgaccctt tgctgttacc acccagagct ttggctccaa cgcagagggc cagcacagt
 1200
 gttttggccc ccagcccaac cctgagaaaag ttcagaacca cagcgggtcc tctgcccggg
 1260
 ggaacctgtc tgggaagccc gatgactggc cccaggacat gaaagagtat gtggagcgct
 1320
 gcttcaccgc ctgtgagtcg gaggaggaca aggaccgcac ggaaaagctg ctcaaggagg
 1380
 tgctgcaggc gcggctgcag gacggctcgg cctataccat tgactggagc cggga
 1435

<210> 3278

<211> 104

<212> PRT

<213> Homo sapiens

<400> 3278

Met	Ala	Ala	Asn	Val	Gly	Asp	Gln	Arg	Ser	Thr	Asp	Trp	Ser	Ser	Gln
1				5					10					15	
Tyr	Ser	Met	Val	Ala	Gly	Ala	Gly	Arg	Glu	Asn	Gly	Met	Glu	Thr	Pro
			20					25					30		
Met	His	Glu	Asn	Pro	Glu	Trp	Glu	Lys	Ala	Arg	Gln	Ala	Leu	Ala	Ser
		35					40					45			
Ile	Ser	Lys	Ser	Gly	Ala	Ala	Gly	Gly	Ser	Ala	Lys	Ser	Ser	Ser	Asn
	50					55					60				
Gly	Pro	Val	Ala	Ser	Ala	Ser	Thr	Cys	Pro	Arg	Gln	Lys	Pro	Gln	Leu
65					70					75					80
Cys	Ser	Ser	Ser	Ser	Thr	Thr	Ser	Gly	Thr	Ser	Ser	Thr	Thr	Met	Pro
				85					90					95	
Thr	Pro	Thr	Ala	Thr	Thr	Ile	Pro								
				100											

<210> 3279

<211> 1130

<212> DNA

<213> Homo sapiens

<400> 3279

nngcgcgcc accgcgcgc atccatgttc gacaccacac cccactctgg ccggagcacg
 60
 ccaagcagct ccccatcgct ccggaaacgg ctgcagctcc tgcccccaag ccggccccca
 120

cctgagccag aaccaggcac catggtggag aagggatcag atagctcctc agagaagggg
 180
 ggggtgcctg ggacccccag caccagagc ctaggcagcc ggaacttcat ccgcaacagc
 240
 aagaagatgc agagctggta cagtatgctg agccccactt ataagcagcg taatgaggac
 300
 ttccggaaac tgttcagcaa actccccgaa gcagaacgcc tcattgtgga ttactcctgc
 360
 gccctgcagc gtgagatcct gctccagggc cgctctacc tctctgagaa ctggatctgc
 420
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 480
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 540
 agcgagaagc atttcttcac ttcctttggg gccctgacc gctgcttct cctcatcttc
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 cgcctctggc agaatgcact gcttgaaaag acgctgagtc cccgcgagct ctggcacctg
 660
 gtgcatcagt gctacggctc agagctgggc ctcaccagtg aggatgagga ctatgtctcc
 720
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<210> 3280

<211> 376

<212> PRT

<213> Homo sapiens

<400> 3280

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			20					25					30		
Leu	Leu	Pro	Pro	Ser	Arg	Pro	Pro	Pro	Glu	Pro	Glu	Pro	Gly	Thr	Met
		35				40					45				
Val	Glu	Lys	Gly	Ser	Asp	Ser	Ser	Ser	Glu	Lys	Gly	Gly	Val	Pro	Gly
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Thr	Pro	Ser	Thr	Gln	Ser	Leu	Gly	Ser	Arg	Asn	Phe	Ile	Arg	Asn	Ser
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Lys	Lys	Met	Gln	Ser	Trp	Tyr	Ser	Met	Leu	Ser	Pro	Thr	Tyr	Lys	Gln
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Arg	Asn	Glu	Asp	Phe	Arg	Lys	Leu	Phe	Ser	Lys	Leu	Pro	Glu	Ala	Glu

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Arg	Leu	Ile	Val	Asp	Tyr	Ser	Cys	Ala	Leu	Gln	Arg	Glu	Ile	Leu	Leu
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Gln	Gly	Arg	Leu	Tyr	Leu	Ser	Glu	Asn	Trp	Ile	Cys	Phe	Tyr	Ser	Asn
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Ile	Phe	Arg	Trp	Glu	Thr	Thr	Ile	Ser	Ile	Gln	Leu	Lys	Glu	Val	Thr
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Cys	Leu	Lys	Lys	Glu	Lys	Thr	Ala	Lys	Leu	Ile	Pro	Asn	Ala	Ile	Gln
			165						170					175	
Ile	Cys	Thr	Glu	Ser	Glu	Lys	His	Phe	Phe	Thr	Ser	Phe	Gly	Ala	Arg
			180					185					190		
Asp	Arg	Cys	Phe	Leu	Leu	Ile	Phe	Arg	Leu	Trp	Gln	Asn	Ala	Leu	Leu
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Tyr	Gly	Ser	Glu	Leu	Gly	Leu	Thr	Ser	Glu	Asp	Glu	Asp	Tyr	Val	Ser
225				230						235					240
Pro	Leu	Gln	Leu	Asn	Gly	Leu	Gly	Thr	Pro	Lys	Glu	Val	Gly	Asp	Val
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Ser	Arg	Ala	Ser	Ser	Asp	Ala	Asp	His	Gly	Ala	Glu	Glu	Asp	Lys	Glu
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Glu	Gln	Val	Asp	Ser	Gln	Pro	Asp	Ala	Ser	Ser	Ser	Gln	Thr	Val	Thr
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Pro	Val	Ala	Glu	Pro	Pro	Ser	Thr	Glu	Pro	Thr	Gln	Pro	Asp	Gly	Pro
			325						330					335	
Thr	Thr	Leu	Gly	Pro	Leu	Asp	Leu	Leu	Pro	Ser	Glu	Glu	Leu	Leu	Thr
		340						345					350		
Asp	Thr	Ser	Asn	Ser	Ser	Ser	Ser	Thr	Gly	Glu	Glu	Ala	Asp	Leu	Ala
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<210> 3281

<211> 842

<212> DNA

<213> Homo sapiens

<400> 3281

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120

ggcaaggagg tagagccagc ggctgaggac ctgtcagggc cagtcccagc tctgcagctt
180

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240

gggtcctgac acggatctca tgggattgct ctgaggccca ggcagtccca ggctcaacca
300

ctggttcaca aagtgtgttg tttccaggaa gaacagatgg gggcgctga gggcaaaggg
360

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 480
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<210> 3282

<211> 146

<212> PRT

<213> Homo sapiens

<400> 3282

Met	Pro	Thr	Asn	Pro	Gly	Leu	His	Leu	Ala	Leu	Ala	Pro	Val	Ser	Val
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			20					25					30		
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Thr	Ser	Phe	Ala	Arg	Gly	Lys	Glu	His	His	Val	Gly	His	Ile	His	Glu
	50				55					60					
Gly	Thr	Gly	Asn	Ser	Val	Val	Pro	Ser	Val	Thr	Pro	Cys	Gln	Asp	Thr
65				70					75					80	
Gln	Asp	Glu	Asn	Pro	Ala	Pro	Glu	Arg	Ala	Ala	Gly	Ile	Ser	Ser	Thr
			85					90					95		
His	Thr	Gln	Ala	Leu	Cys	Pro	Gln	Ala	Pro	Pro	Ser	Val	Leu	Pro	Gly
		100					105					110			
Asn	Asn	Thr	Leu	Cys	Glu	Pro	Val	Val	Glu	Pro	Gly	Thr	Ala	Trp	Ala
		115					120					125			
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<210> 3283

<211> 3268

<212> DNA

<213> Homo sapiens

<400> 3283

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<210> 3284
 <211> 1012
 <212> PRT
 <213> Homo sapiens

<400> 3284

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			20					25					30		
Ala	Phe	Thr	Arg	Xaa	His	Val	Cys	Ala	Glu	Asn	Leu	Pro	Pro	Val	Leu
			35				40					45			
Met	Glu	His	Lys	Ala	Thr	Thr	Ile	Gln	Lys	His	Val	Arg	Gly	Trp	Met
	50					55					60				
Ala	Arg	Arg	His	Phe	Gln	Arg	Leu	Arg	Asp	Ala	Ala	Ile	Val	Ile	Gln
65					70					75				80	
Cys	Ala	Phe	Arg	Met	Leu	Lys	Ala	Arg	Arg	Glu	Leu	Lys	Ala	Leu	Arg
				85				90					95		
Ile	Glu	Ala	Arg	Ser	Ala	Glu	His	Leu	Lys	Arg	Leu	Asn	Val	Gly	Met
			100					105					110		
Glu	Asn	Lys	Val	Val	Gln	Leu	Gln	Arg	Lys	Ile	Asp	Glu	Gln	Asn	Lys
	115					120						125			
Glu	Phe	Lys	Thr	Leu	Ser	Glu	Gln	Leu	Ser	Val	Thr	Thr	Ser	Thr	Tyr
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Thr	Met	Glu	Val	Glu	Arg	Leu	Lys	Lys	Glu	Leu	Val	His	Tyr	Gln	Gln
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Ser	Pro	Gly	Glu	Asp	Thr	Ser	Leu	Arg	Leu	Gln	Glu	Glu	Val	Glu	Ser
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Leu	Arg	Thr	Glu	Leu	Gln	Arg	Ala	His	Ser	Glu	Arg	Lys	Ile	Leu	Glu
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Asp	Ala	His	Ser	Arg	Glu	Lys	Asp	Glu	Leu	Arg	Lys	Arg	Val	Ala	Asp
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	210					215					220				
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Lys	Glu	Asn	Leu	Leu	Met	Lys	Lys	Glu	Leu	Glu	Glu	Glu	Arg	Ser	Arg
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Tyr	Gln	Asn	Leu	Val	Lys	Glu	Tyr	Ser	Gln	Leu	Glu	Gln	Arg	Tyr	Asp
			260					265					270		
Asn	Leu	Arg	Asp	Glu	Met	Thr	Ile	Ile	Lys	Gln	Thr	Pro	Gly	His	Arg
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Val	Glu	Glu	Ile	Gly	Leu	Glu	Lys	Ala	Ala	Met	Asp	Met	Thr	Val	Phe
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Leu	Lys	Leu	Gln	Lys	Arg	Val	Arg	Glu	Leu	Glu	Gln	Glu	Arg	Lys	Lys
			340					345					350		
Leu	Gln	Val	Gln	Leu	Glu	Lys	Arg	Glu	Gln	Gln	Asp	Ser	Lys	Lys	Val
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Gln	Ala	Glu	Pro	Pro	Gln	Thr	Asp	Ile	Asp	Leu	Asp	Pro	Asn	Ala	Asp

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Ala Thr Gln Asn Asn Ser	Ser His Gly Ser Pro	Asp Ser Tyr Ser Leu
420	425	430
Leu Leu Asn Gln Leu Lys	Leu Ala His Glu Glu	Leu Glu Val Arg Lys
435	440	445
Glu Glu Val Leu Ile Leu	Arg Thr Gln Ile Val	Ser Ala Asp Gln Arg
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Arg Leu Ala Gly Arg Asn	Ala Glu Pro Asn Ile	Asn Ala Arg Ser Ser
465	470	475
Trp Pro Asn Ser Glu Arg	His Val Asp Gln Glu	Asp Ala Ile Glu Ala
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Tyr His Gly Val Cys Gln	Thr Asn Arg Leu Leu	Glu Ala Gln Leu Gln
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Gln Thr Leu Leu Leu Ser	Pro Glu Ala Gln Val	Glu Phe Gly Val Gln
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Gln Ser Glu Arg Lys Arg	His Glu Leu Asn Arg	Gln Val Thr Val Gln
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690	695	700
Asp Asp Phe Glu Met Thr	Ser Phe Trp Leu Ser	Asn Thr Cys Arg Leu
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Leu His Cys Leu Lys Gln	Tyr Ser Gly Asp Glu	Gly Phe Met Thr Gln
725	730	735
Asn Thr Ala Lys Gln Asn	Glu His Cys Leu Lys	Asn Phe Asp Leu Thr
740	745	750
Glu Tyr Arg Gln Val Leu	Ser Asp Leu Ser Ile	Gln Ile Tyr Gln Gln
755	760	765
Leu Ile Lys Ile Ala Glu	Gly Val Leu Gln Pro	Met Ile Val Ser Ala
770	775	780
Met Leu Glu Asn Glu Ser	Ile Gln Gly Leu Ser	Gly Val Lys Pro Thr
785	790	795
Gly Tyr Arg Lys Arg Ser	Ser Ser Met Ala Asp	Gly Asp Asn Ser Tyr

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Cys	Asp	Gln	Gly	Leu	Asp	Pro	Glu	Ile	Ile	Leu	Gln	Val	Phe	Lys	Gln
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Leu	Phe	Tyr	Met	Ile	Asn	Ala	Val	Thr	Leu	Asn	Asn	Leu	Leu	Leu	Arg
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Lys	Asp	Val	Cys	Ser	Trp	Ser	Thr	Gly	Met	Gln	Leu	Arg	Tyr	Asn	Ile
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<211> 1518

<212> DNA

<213> Homo sapiens

<400> 3285

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 960
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 1080
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 1140
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 1200
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 1320
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 1380
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<210> 3286

<211> 142

<212> PRT

<213> Homo sapiens

<400> 3286

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Lys	Asn	Leu	Arg	Tyr	Glu	Ala	Ala	Thr	Ser	Asp	Thr	Tyr	Arg	Lys	Gly
			20					25					30		
Lys	Asn	Asn	Asp	Asn	Thr	Arg	Pro	Ala	Pro	Pro	Pro	Lys	Ser	Cys	Cys
			35				40					45			
Cys	Glu	Leu	Arg	Leu	Gln	Lys	Arg	Thr	His	Thr	Val	Ala	Asp	Lys	Thr
			50			55					60				
Gln	Ala	Arg	Arg	Met	Phe	Glu	Ser	Gln	Ser	Ala	Leu	Ser	Leu	Val	Pro
65					70				75					80	
Val	Thr	Ser	Tyr	Val	Gln	Leu	Pro	Gly	Pro	Ile	Pro	Tyr	Ser	Asp	Cys
			85				90					95			
Arg	Leu	Arg	Thr	Glu	Asp	Ala	Pro	Leu	Leu	Ser	Leu	His	Phe	Asp	Leu
			100				105				110				
Leu	Phe	Pro	Leu	Lys	Thr	Arg	Arg	Pro	Ala	Phe	Pro	Lys	Thr	Ala	Trp

	115		120		125								
Pro	Trp	Leu	Cys	Thr	Leu	Phe	Thr	Thr	Asp	Gln	Asn	Ser	Ile
	130					135					140		

<210> 3287
 <211> 921
 <212> DNA
 <213> Homo sapiens

<400> 3287
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 120
 gcgtaagccc aatccgggaa actcgttgcc cctctcctgg gaaaggaacg tccctcccca
 180
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 240
 tggaaataga gggcgcggaa gcgacgctgg gcatcgcccg ctccatcgag gtgtgccgag
 300
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 360
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 420
 tacttgagaga ggccgaagct gaagctacag gactgagggg ctggaaaggg cgcgggagag
 480
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 540
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 600
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 660
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 720
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 780
 aggctggagg gggcttggca gccaaagctaa ttcgggagaa tttctatgat tatgattttt
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 921

<210> 3288
 <211> 148
 <212> PRT
 <213> Homo sapiens

<400> 3288
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 Leu Gly Arg Val Gly Ile Val Ser Pro Ala Pro Phe Pro Ala Pro Gln
 20 25 30
 Ser Cys Ser Phe Ser Phe Gly Leu Ser Lys Tyr Pro Gly Pro Pro Cys

```

          35          40          45
Ile Pro Leu Pro Phe Ser Cys Gly Cys Gly Ala Ser Leu Asn Arg Ser
   50          55          60
Thr Phe Leu Phe Pro Ser Thr Arg Asp Arg Glu Ser Leu Lys Gly Ser
65          70          75          80
Gly Ala Pro Ser Ala His Leu Asp Gly Ala Gly Asp Ala Gln Arg Arg
          85          90          95
Phe Arg Ala Leu Tyr Phe Gln Leu Gln His Ser Gln Val Phe Thr Ala
   100          105          110
Gln Gly Asp Gly Ala Arg Val Thr Arg Asn Pro Gly Glu Gly Arg Ser
   115          120          125
Phe Pro Arg Arg Gly Ala Thr Ser Phe Pro Asp Trp Ala Tyr Ala Gly
   130          135          140
Gly Arg Gln Leu
145

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<210> 3289
 <211> 554
 <212> DNA
 <213> Homo sapiens

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<400> 3289
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120
cccagcctcc tagcccaata tcagggccgg aggcactgga gaacttcogg ctaaggcagg
180
cctccctcc cttcacaga gccctgccag ggtggctggc aatgggtgaag tccagggcag
240
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300
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360
tccgagagga agggactgtg tccagggcgg gaccaggcc cttctgcact ggggtcaatga
420
gccaaagcaca tcacccacg ccttggggag caggagccgg gccttgccagg gtgaggagct
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540
ataagctgca attg
554

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<210> 3290
 <211> 129
 <212> PRT
 <213> Homo sapiens

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<400> 3290
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  1          5          10          15
Pro Cys Lys Ala Arg Leu Leu Leu Pro Lys Gly Trp Gly Asp Val Leu
   20          25          30
Gly Ser Leu Thr Gln Cys Arg Arg Ala Trp Val Pro Pro Trp Thr Gln

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<210> 3291
<211> 1075
<212> DNA
<213> Homo sapiens
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<400> 3291
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120
tgggccctt ctcccgcac gcctgcggtg aggtcccccg ccccgctctcc taccatagct
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240
agcgagtctn ggcgtcgacc gctgccgcca cccagttac ccctccac cccgcgcgtcc
300
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720
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1020

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1075

<210> 3292

<211> 102

<212> PRT

<213> Homo sapiens

<400> 3292

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			20					25					30		
Trp	Ser	Ala	Thr	Pro	Gly	Pro	Pro	Trp	Ala	Pro	Ser	Pro	Ala	Thr	Pro
		35				40					45				
Ala	Val	Arg	Leu	Pro	Ala	Pro	Ser	Pro	Thr	Ile	Ala	Ala	Ser	Val	Pro
	50					55				60					
Pro	His	Trp	Leu	Phe	Thr	Trp	Leu	Ala	Val	Ser	Val	Ser	Gln	Pro	Gly
65				70					75					80	
Ser	Glu	Ser	Xaa	Arg	Arg	Pro	Leu	Pro	Pro	Pro	Gln	Leu	Pro	Pro	Pro
				85				90						95	
Thr	Pro	Pro	Ser	Leu	Pro										
				100											

<210> 3293

<211> 2362

<212> DNA

<213> Homo sapiens

<400> 3293

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gcaggacgcc gacacctacc cctcagcaga cgccggagag aaatgagtag caacaagag
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720

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780
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2362

<210> 3294

<211> 353

<212> PRT

<213> Homo sapiens

<400> 3294

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Gln	Arg	Gly	His	Met	Ala	Cys	Ser	Arg	Pro	Pro	Ser	Gln	Cys	Glu	Pro	20	25	30	
Thr	Ser	Leu	Pro	Pro	Gly	Pro	Pro	Ala	Gly	Arg	Arg	His	Leu	Pro	Leu	35	40	45	
Ser	Arg	Arg	Arg	Arg	Glu	Met	Ser	Ser	Asn	Lys	Glu	Gln	Arg	Ser	Ala	50	55	60	
Val	Phe	Val	Ile	Leu	Phe	Ala	Leu	Ile	Thr	Ile	Leu	Ile	Leu	Tyr	Ser	65	70	75	80
Ser	Asn	Ser	Ala	Asn	Glu	Val	Phe	His	Tyr	Gly	Ser	Leu	Arg	Gly	Arg	85	90	95	
Ser	Arg	Arg	Pro	Val	Asn	Leu	Lys	Lys	Trp	Ser	Ile	Thr	Asp	Gly	Tyr	100	105	110	
Val	Pro	Ile	Leu	Gly	Asn	Lys	Thr	Leu	Pro	Ser	Arg	Cys	His	Gln	Cys	115	120	125	
Val	Ile	Val	Ser	Ser	Ser	Ser	His	Leu	Leu	Gly	Thr	Lys	Leu	Gly	Pro	130	135	140	
Glu	Ile	Glu	Arg	Ala	Glu	Cys	Thr	Ile	Arg	Met	Asn	Asp	Ala	Pro	Thr	145	150	155	160
Thr	Gly	Tyr	Ser	Ala	Asp	Val	Gly	Asn	Lys	Thr	Thr	Tyr	Arg	Val	Val	165	170	175	
Ala	His	Ser	Ser	Val	Phe	Arg	Val	Leu	Arg	Arg	Pro	Gln	Glu	Phe	Val	180	185	190	
Asn	Arg	Thr	Pro	Glu	Thr	Val	Phe	Ile	Phe	Trp	Gly	Pro	Pro	Ser	Lys	195	200	205	
Met	Gln	Lys	Pro	Gln	Gly	Ser	Leu	Val	Arg	Val	Ile	Gln	Arg	Ala	Gly	210	215	220	
Leu	Val	Phe	Pro	Asn	Met	Glu	Ala	Tyr	Ala	Val	Ser	Pro	Gly	Arg	Met	225	230	235	240
Arg	Gln	Phe	Asp	Asp	Leu	Phe	Arg	Gly	Glu	Thr	Gly	Lys	Asp	Arg	Glu	245	250	255	
Lys	Ser	His	Ser	Trp	Leu	Ser	Thr	Gly	Trp	Phe	Thr	Met	Val	Ile	Ala	260	265	270	
Val	Glu	Leu	Cys	Asp	His	Val	His	Val	Tyr	Gly	Met	Val	Pro	Pro	Asn	275	280	285	
Tyr	Cys	Ser	Gln	Arg	Pro	Arg	Leu	Gln	Arg	Met	Pro	Tyr	His	Tyr	Tyr	290	295	300	
Glu	Pro	Lys	Gly	Pro	Asp	Glu	Cys	Val	Thr	Tyr	Ile	Gln	Asn	Glu	His	305	310	315	320
Ser	Arg	Lys	Gly	Asn	His	His	Arg	Phe	Ile	Thr	Glu	Lys	Arg	Val	Phe	325	330	335	
Ser	Ser	Trp	Ala	Gln	Leu	Tyr	Gly	Ile	Thr	Phe	Ser	His	Pro	Ser	Trp	340	345	350	
Thr																			

<210> 3295
 <211> 690
 <212> DNA
 <213> Homo sapiens

<400> 3295
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 690

<210> 3296
 <211> 120
 <212> PRT
 <213> Homo sapiens

<400> 3296
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 Leu Trp Glu Arg Pro Gly Cys Cys Ile Arg His Arg Ile Thr Trp Glu
 20 25 30
 Pro Arg His Met Gly Pro Ala Leu Arg Ser Leu Gln Val Lys Lys Gly
 35 40 45
 Thr Glu His Ala Asp Pro Leu Pro Phe Pro Ser Val Ser Leu Ser Gly
 50 55 60
 Phe Thr Val Gly Thr Leu Ser Glu Thr Ser Thr Gly Gly Pro Ala Thr
 65 70 75 80
 Pro Thr Trp Lys Glu Cys Pro Ile Cys Lys Glu Arg Phe Pro Ala Glu
 85 90 95
 Ser Asp Lys Asp Ala Leu Glu Asp His Met Asp Gly His Phe Phe Phe
 100 105 110
 Ser Thr Gln Gly Pro Leu His Leu

115

120

<210> 3297

<211> 3176

<212> DNA

<213> Homo sapiens

<400> 3297

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2160
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<211> 251

<212> PRT

<213> Homo sapiens

<400> 3298

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			20					25					30		
Cys	Leu	Trp	Val	Ser	Phe	Cys	Val	Cys	Val	Cys	Ile	Cys	Val	Cys	Val
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65				70						75				80	
Phe	Val	Cys	Phe	Trp	Val	Cys	Leu	Ser	Ala	Cys	Leu	Cys	Ile	Pro	Val
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Glu	Gly	Glu	Arg	Lys	Gly	Ala	Thr	Asp	Gly	Ser	Ala	Trp	Lys	Val	Tyr
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		180					185						190		
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<212> DNA

<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

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		35					40					45			
Ser	Ile	Gln	Gln	Phe	Thr	Glu	Met	Asn	Leu	Leu	Ser	Asp	Tyr	Arg	Phe
		50					55				60				
Leu	Glu	Asp	Val	Ala	Arg	Thr	Ala	Asp	His	Ile	Ser	Arg	Asp	Ala	Phe
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Leu	Lys	Arg	Pro	Ile	Ser	Asn	Lys	Tyr	Met	Tyr	Phe	Met	Lys	Asn	Arg
				85					90					95	
Ala	Arg	Ser	Lys	Gly	Ile	Asn	Leu	Lys	Leu	Leu	Pro	Asn	Gly	Phe	Thr
			100					105					110		
Lys	Arg	Lys	Glu	Asn	Ser	Thr	Phe	Phe	Asp	Lys	Lys	Lys	Gln	Gln	Phe
		115					120					125			
Cys	Trp	His	Val	Lys	Leu	Gln	Phe	Pro	Gln	Ser	Gln	Ala	Glu	Tyr	Ile
		130					135				140				
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Tyr	Ile	Asp	Pro	Glu	Lys	Ser	Asp	Pro	Val	Ile	Arg	Gln	Arg	Leu	Lys
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			180					185					190		
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<211> 2109

<212> DNA

<213> Homo sapiens

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 <213> Homo sapiens

<400> 3302

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35      40      45
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50      55      60
Ile Asp Ile Phe Pro Val Thr Asn Lys Asp Phe Arg Asp Phe Val Arg
65      70      75      80
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85      90      95
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145     150     155     160
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165     170     175
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195     200     205
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260     265     270
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275     280     285
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<211> 233

<212> PRT

<213> Homo sapiens

<400> 3304

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			20					25					30		
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			35				40					45			
Lys	Lys	Gly	Trp	Leu	Thr	Lys	Gln	Tyr	Glu	Asp	Gly	Gln	Trp	Lys	Lys
	50					55				60					
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Val	Ala	Glu	Glu	Ala	Ala	Asp	Leu	Asp	Gly	Glu	Ile	Asp	Leu	Ser	Ala
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Cys	Tyr	Asp	Val	Thr	Glu	Tyr	Pro	Val	Gln	Arg	Asn	Tyr	Gly	Phe	Gln
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<212> DNA
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<212> PRT

<213> Homo sapiens

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Trp His Pro Thr Leu Asn Leu Pro Leu Ser Pro Gln Gly Thr Val Arg
          50           55           60
Thr Ala Val Glu Phe Gln Val Met Thr Gln Thr Gln Ser Leu Ser Phe
65           70           75           80
Leu Leu Gly Ser Ser Ala Ser Leu Asp Cys Gly Phe Ser Met Ala Pro
          85           90           95
Gly Leu Asp Leu Ile Ser Val Glu Trp Arg Leu Gln His Lys Gly Arg
          100          105          110
Gly Gln Leu Val Tyr Ser Trp Thr Ala Gly Gln Gly Gln Ala Val Arg
          115          120          125
Lys Gly Ala Thr Leu Xaa Ala Cys Thr Thr Gly His Gly Xaa Arg Asp
          130          135          140
Ala Ser Leu Thr Leu Pro Gly Leu Thr Ile Gln Asp Glu Gly Thr Tyr
145          150          155          160
Ile Cys Gln Ile Thr Thr Ser Leu Tyr Arg Ala Gln Gln Ile Ile Gln
          165          170          175
Leu Asn Ile Gln Ala Ser Pro Lys Val Arg Leu Ser Leu Ala Asn Glu
          180          185          190
Ala Leu Leu Pro Thr Leu Ile Cys Asp Ile Ala Gly Tyr Tyr Pro Leu
          195          200          205
Asp Val Val Val Thr Trp Thr Arg Glu Glu Leu Gly Gly Ser Pro Ala
          210          215          220
Gln Val Ser Gly Ala Ser Phe Ser Ser Leu Arg Gln Ser Val Ala Gly
225          230          235          240
Thr Tyr Ser Ile Ser Ser Ser Leu Thr Ala Glu Pro Gly Leu Cys Arg
          245          250          255
Cys His Leu His Leu Pro Gly His Thr His Leu Ser Gly Gly Ala Pro
          260          265          270
Trp Gly Gln His Pro Gly Cys Pro Thr Arg Ala Glu Asn Ser Leu Gly
          275          280          285
Ser His Leu Cys Gln Gln Ser Leu Pro Ser Cys Thr Asp Val Pro Gly
          290          295          300
Ala Ser Glu Thr Ala Ser Thr Tyr Arg Thr Trp Ala Ala Ser Gly
305          310          315

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<210> 3307

<211> 352

<212> DNA

<213> Homo sapiens

<400> 3307

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 120
 gaggtgggag ccctgccttg gccagggtag ccgtgttgac gggtcctggg actgtgacat
 180
 tggaaggcga ggcaggtcac cagcactgtc ctctgcagga tgggctggga ttcatttggc
 240
 agcttctcag ggctgtgtc cggctgggtg gtccctgtgc tgcccaaacc aggtgtccac
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 352

<210> 3308

<211> 110

<212> PRT

<213> Homo sapiens

<400> 3308

Met	Gly	Leu	Pro	Arg	Ala	Leu	Ala	Leu	Pro	Ser	Gly	Gly	Arg	Ser	Gly
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Ser	Leu	His	Pro	Asp	Pro	Gly	Ala	Ser	Leu	Pro	Cys	Pro	Val	Leu	Ile
			20					25					30		
Pro	Arg	Trp	Glu	Pro	Cys	Leu	Gly	Gln	Gly	Gly	Arg	Val	Asp	Gly	Ser
			35				40					45			
Trp	Asp	Cys	Asp	Ile	Gly	Arg	Arg	Gly	Arg	Ser	Pro	Ala	Leu	Ser	Ser
			50				55				60				
Ala	Gly	Trp	Ala	Gly	Ile	His	Leu	Ala	Ala	Ser	Gln	Gly	Leu	Cys	Pro
65					70					75				80	
Ala	Gly	Trp	Ser	Leu	Cys	Cys	Pro	Asn	Gln	Val	Ser	Thr	Phe	Pro	Ala
				85				90						95	
Pro	Met	Arg	Arg	Glu	Gly	Gly	Arg	Trp	Trp	Leu	Gly	Trp	Arg		
			100					105					110		

<210> 3309

<211> 737

<212> DNA

<213> Homo sapiens

<400> 3309

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 120
 cccaggacc ccaagtacca gggctctgcg gcacgtggcc gggagatccg gaaggagctt
 180
 gttcacctgt accccaggga ggcccagctt gaggagcagt tctacctgca ggcgctgaag
 240
 ctgcccacc agacccaccc agacgtgccc gtcggggatg agagccaggc tcgagtgtc
 300
 cacatggctg gagacaagcc agttttctcc ttccaacctc ggggccacct ggaaattggc
 360
 gagaaactcg acatcatccg tcagaagcgc ctgtcccacg tgtctggcca ccggtcctat
 420
 tacctgcgcg gggctggagc cctcctgcag cacggcctgg tcaacttcac attcaacaag
 480

cttctccgcc ggggcttcac ccccatgacg gtgccagacc ttctccgcgg agcagtgttt
 540
 gaaggctgtg ggatgacacc aaatgccaac ccatcccaaa tttacaacat cgaccctgcc
 600
 cgcttcaaag atctcaacct tgctggaaca gcggaggtgg ggcttgcagg ctacttcatg
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 720
 cgggcagaga caaacac
 737

<210> 3310
 <211> 210
 <212> PRT
 <213> Homo sapiens

<400> 3310
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 Arg Gly Arg Glu Ile Arg Lys Glu Leu Val His Leu Tyr Pro Arg Glu
 20 25 30
 Ala Gln Leu Glu Glu Gln Phe Tyr Leu Gln Ala Leu Lys Leu Pro Asn
 35 40 45
 Gln Thr His Pro Asp Val Pro Val Gly Asp Glu Ser Gln Ala Arg Val
 50 55 60
 Leu His Met Val Gly Asp Lys Pro Val Phe Ser Phe Gln Pro Arg Gly
 65 70 75 80
 His Leu Glu Ile Gly Glu Lys Leu Asp Ile Ile Arg Gln Lys Arg Leu
 85 90 95
 Ser His Val Ser Gly His Arg Ser Tyr Tyr Leu Arg Gly Ala Gly Ala
 100 105 110
 Leu Leu Gln His Gly Leu Val Asn Phe Thr Phe Asn Lys Leu Leu Arg
 115 120 125
 Arg Gly Phe Thr Pro Met Thr Val Pro Asp Leu Leu Arg Gly Ala Val
 130 135 140
 Phe Glu Gly Cys Gly Met Thr Pro Asn Ala Asn Pro Ser Gln Ile Tyr
 145 150 155 160
 Asn Ile Asp Pro Ala Arg Phe Lys Asp Leu Asn Leu Ala Gly Thr Ala
 165 170 175
 Glu Val Gly Leu Ala Gly Tyr Phe Met Asp His Thr Val Ala Phe Arg
 180 185 190
 Asp Leu Pro Val Arg Met Val Cys Ser Ser Thr Cys Tyr Arg Ala Glu
 195 200 205
 Thr Asn
 210

<210> 3311
 <211> 486
 <212> DNA
 <213> Homo sapiens

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 120
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 180
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 240
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 300
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 360
 ttctggaagg ttggactcat ctcaggtaca gtttttgtga tcctcggatt gactgttctg
 420
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 480
 gtcgac
 486

<210> 3312

<211> 102

<212> PRT

<213> Homo sapiens

<400> 3312

Met	Ser	Ser	Cys	Ser	Asn	Val	Cys	Gly	Ser	Arg	Gln	Ala	Gln	Ala	Ala
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Ala	Glu	Gly	Gly	Tyr	Gln	Arg	Tyr	Gly	Val	Arg	Ser	Tyr	Leu	His	Gln
			20					25					30		
Phe	Tyr	Glu	Asp	Cys	Thr	Ala	Ser	Ile	Trp	Glu	Tyr	Glu	Asp	Asp	Phe
			35				40					45			
Gln	Ile	Gln	Arg	Ser	Pro	Asn	Arg	Trp	Ser	Ser	Val	Phe	Trp	Lys	Val
		50				55					60				
Gly	Leu	Ile	Ser	Gly	Thr	Val	Phe	Val	Ile	Leu	Gly	Leu	Thr	Val	Leu
65					70				75					80	
Ala	Val	Gly	Phe	Leu	Val	Pro	Pro	Lys	Ile	Glu	Ala	Phe	Gly	Glu	Ala
				85				90						95	
Asp	Phe	Val	Val	Val	Asp										
				100											

<210> 3313

<211> 1791

<212> DNA

<213> Homo sapiens

<400> 3313

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 120
 cccggggcgg gtcgagttgg cggcggcggc ggccgantgc gttctcgtca gccggaaggg
 180
 ctgcgaagtc atcataaagt ttctgtttca cccgtcgtcc atgttcgagg actctgtgaa
 240
 tctgtggtgg aagcagacct cgtggaagcg ctggaaaaat ttgggacaat atgctatgtg
 300

atgatgatgc catttaaacy acaggctcta gtggaatttg aaaacataga tagtgccaaa
360
gaatgtgtga cttttgctgc agatgaaccc gtgtacattg ctggtcaaca ggcttttttc
420
aactattcta caagcaaaag gatcactcgg ccaggaaata ctgatgatcc atcaggaggc
480
aacaagttc ttctgctctc aattcagaat ccgctttatc caattacagt ggatgtttta
540
tatactgtat gcaaccctgt tggcaaagtg caacgtattg ttatattcaa gagaaatggg
600
atacaagcaa tggttgagtt tgaatcagtc ctttgtgccc agaaagctaa agcagcactc
660
aatggagctg atatatatgc tggatgttgc aactaaaaa ttgaatatgc acggccaact
720
cgtctaaatg ttattaggaa tgacaatgac agttgggact acactaaacc atatttggga
780
agacgagata gaggaaaggg tcgccagaga caagccattt tgggagaaca cccttcttcg
840
tttagacatg atggctatgg atcccatggt ccattattgc ctttaccaag tcgttacaga
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960
tacatgcatg gaggaaatcc ctctgggtca gttgtaatgg ttagtggatt acatcaacta
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1200
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1260
agctacaaag attttgcaat gagcaaaaat aatcgcttta caagtgtgg ccaagcatct
1320
aagaatataa tccagccacc ctctgtgtt ttgcattatt ataatgttcc attgtgtgtc
1380
acagaagaga ccttcacaaa gttgtgtaat gaccatgaag ttcttacatt catcaaatat
1440
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1500
aaaactgatg cagtagaagc cttacggca ctgaatcact atcagataag agtgccgaat
1560
ggttccaatc cctatacatt gaagctttgc ttttctacat catcccattt ataagaagag
1620
aagagcatgt tagaatttat gttcaccttt attacaattt caaagctaca cttcattaaa
1680
aaaaaatcta aaatggttga tctcatgttg ccttgcttac ttaagatcc tgttctgtaa
1740
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1791

<210> 3314

<211> 537

<212> PRT

<213> Homo sapiens

<400> 3314

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          20           25           30
Ala Arg Thr Ala Val Lys Arg Arg Pro Gly Ala Gly Arg Val Gly Gly
          35           40           45
Gly Gly Gly Arg Xaa Arg Ser Arg Gln Pro Glu Gly Leu Arg Ser His
          50           55           60
His Lys Val Ser Val Ser Pro Val Val His Val Arg Gly Leu Cys Glu
65           70           75           80
Ser Val Val Glu Ala Asp Leu Val Glu Ala Leu Glu Lys Phe Gly Thr
          85           90           95
Ile Cys Tyr Val Met Met Met Pro Phe Lys Arg Gln Ala Leu Val Glu
          100          105          110
Phe Glu Asn Ile Asp Ser Ala Lys Glu Cys Val Thr Phe Ala Ala Asp
115           120           125
Glu Pro Val Tyr Ile Ala Gly Gln Gln Ala Phe Phe Asn Tyr Ser Thr
          130          135          140
Ser Lys Arg Ile Thr Arg Pro Gly Asn Thr Asp Asp Pro Ser Gly Gly
145           150           155           160
Asn Lys Val Leu Leu Leu Ser Ile Gln Asn Pro Leu Tyr Pro Ile Thr
          165          170          175
Val Asp Val Leu Tyr Thr Val Cys Asn Pro Val Gly Lys Val Gln Arg
          180          185          190
Ile Val Ile Phe Lys Arg Asn Gly Ile Gln Ala Met Val Glu Phe Glu
          195          200          205
Ser Val Leu Cys Ala Gln Lys Ala Lys Ala Ala Leu Asn Gly Ala Asp
210           215           220
Ile Tyr Ala Gly Cys Cys Thr Leu Lys Ile Glu Tyr Ala Arg Pro Thr
225           230           235           240
Arg Leu Asn Val Ile Arg Asn Asp Asn Asp Ser Trp Asp Tyr Thr Lys
          245          250          255
Pro Tyr Leu Gly Arg Arg Asp Arg Gly Lys Gly Arg Gln Arg Gln Ala
          260          265          270
Ile Leu Gly Glu His Pro Ser Ser Phe Arg His Asp Gly Tyr Gly Ser
          275          280          285
His Gly Pro Leu Leu Pro Leu Pro Ser Arg Tyr Arg Met Gly Ser Arg
290           295           300
Asp Thr Pro Glu Leu Val Ala Tyr Pro Leu Pro Gln Ala Ser Ser Ser
305           310           315           320
Tyr Met His Gly Gly Asn Pro Ser Gly Ser Val Val Met Val Ser Gly
          325          330          335
Leu His Gln Leu Lys Met Asn Cys Ser Arg Val Phe Asn Leu Phe Cys
          340          345          350
Leu Tyr Gly Asn Ile Glu Lys Val Lys Phe Met Lys Thr Ile Pro Gly
          355          360          365
Thr Ala Leu Val Glu Met Gly Asp Glu Tyr Ala Val Glu Arg Ala Val
370           375           380
Thr His Leu Asn Asn Val Lys Leu Phe Gly Lys Arg Leu Asn Val Cys
385           390           395           400
Val Ser Lys Gln His Ser Val Val Pro Ser Gln Ile Phe Glu Leu Glu

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405							410							415						
Asp	Gly	Thr	Ser	Ser	Tyr	Lys	Asp	Phe	Ala	Met	Ser	Lys	Asn	Asn	Arg					
420							425							430						
Phe	Thr	Ser	Ala	Gly	Gln	Ala	Ser	Lys	Asn	Ile	Ile	Gln	Pro	Pro	Ser					
435							440							445						
Cys	Val	Leu	His	Tyr	Tyr	Asn	Val	Pro	Leu	Cys	Val	Thr	Glu	Glu	Thr					
450							455							460						
Phe	Thr	Lys	Leu	Cys	Asn	Asp	His	Glu	Val	Leu	Thr	Phe	Ile	Lys	Tyr					
465							470							475						
Lys	Val	Phe	Asp	Ala	Lys	Pro	Ser	Ala	Lys	Thr	Leu	Ser	Gly	Leu	Leu					
485							490							495						
Glu	Trp	Glu	Cys	Lys	Thr	Asp	Ala	Val	Glu	Ala	Leu	Thr	Ala	Leu	Asn					
500							505							510						
His	Tyr	Gln	Ile	Arg	Val	Pro	Asn	Gly	Ser	Asn	Pro	Tyr	Thr	Leu	Lys					
515							520							525						
Leu	Cys	Phe	Ser	Thr	Ser	Ser	His	Leu												
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<210> 3315
<211> 934
<212> DNA
<213> Homo sapiens
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<400> 3315
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120
gaaggttcaa ttcacagagc acttcatatc taccagggta atatcaaaat atatgttctc
180
aaaacatccc tgagttcacc accttggcca gaagttgttc tgccagaccc agttgaggag
240
accagacacc atgcagaggt cgtgaagaag gtgaatgaga tgatcgtcac ggggcagtat
300
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360
ctgatcttaa ttggaaatga actagacctt gcgtgtggag agagaattcg actggagaag
420
gtcctgctgg ttggggcaga caacttcacg ctgcttggca agccactcct cggaaaggat
480
cttgttcgag tagaagccac agtcattgaa aagacagaat catggccaag aatcattatg
540
agattcagga aaaggaaaaa cttcaagaag aaaagaatcg tcacgacccc gcagactgtc
600
ctccggataa acagcattga gattgctccg tgtttgttgt gattaccgag ttaatactta
660
caaaaggata aaaataaaact cctgcttccc aaggagacca ggtttctgtg ttctggttta
720
aagccgtgca tgccgttgtt agatagttaa actggagcag catgtctgta agcaccaggc
780
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900

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934

<210> 3316
<211> 187
<212> PRT
<213> Homo sapiens

<400> 3316
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Ser Ile His Arg Ala Leu His Ile Tyr Gln Gly Asn Ile Lys Ile Tyr
20 25 30
Val Pro Lys Thr Ser Leu Ser Ser Pro Pro Trp Pro Glu Val Val Leu
35 40 45
Pro Asp Pro Val Glu Glu Thr Arg His His Ala Glu Val Val Lys Lys
50 55 60
Val Asn Glu Met Ile Val Thr Gly Gln Tyr Gly Arg Leu Phe Ala Val
65 70 75 80
Val His Phe Ala Ser Arg Gln Trp Lys Val Thr Ser Glu Asp Leu Ile
85 90 95
Leu Ile Gly Asn Glu Leu Asp Leu Ala Cys Gly Glu Arg Ile Arg Leu
100 105 110
Glu Lys Val Leu Leu Val Gly Ala Asp Asn Phe Thr Leu Leu Gly Lys
115 120 125
Pro Leu Leu Gly Lys Asp Leu Val Arg Val Glu Ala Thr Val Ile Glu
130 135 140
Lys Thr Glu Ser Trp Pro Arg Ile Ile Met Arg Phe Arg Lys Arg Lys
145 150 155 160
Asn Phe Lys Lys Lys Arg Ile Val Thr Thr Pro Gln Thr Val Leu Arg
165 170 175
Ile Asn Ser Ile Glu Ile Ala Pro Cys Leu Leu
180 185

<210> 3317
<211> 1665
<212> DNA
<213> Homo sapiens

<400> 3317
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120
aaaagaagct gagaaaaaaa gatgccaaga ctggaagcat cgaagatggt gagccctttc
180
caagtgctac gttatgaagc tgccaaatta agaacactga gcaaatgtaa ttctcccgt
240
gttgggaaag attatatatta ttttcttctt actttttaat gtctagatcc agaataaag
300
aagtttttag aaacctactg tgtggaggaa gagaagacca gtgccaaccc tgagactctg
360
ctgggggaga tggaggcgaa gacaagagag ctcatgcta gaagaaccac acctcttttg
420

gaatatatta aaaatagaaa attagaaaag cagagaattc gagaagagaa gcgagaagaa
 480
 cggaggagga gagagttaga aaagaaacgt ttgcgggaag aggaaaaaag aagaagaaga
 540
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 600
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 660
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 720
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 780
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 1020
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 1260
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 1320
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 1380
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 1440
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 1500
 cttagccaag caaacaactt ttttttttca ggagctaatt tttgttcagg ttgcattttc
 1560
 ccagcgcagc actacagatg gcatcacctt tctgacagca ccaggcccca ccctggcctc
 1620
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<210> 3318

<211> 253

<212> PRT

<213> Homo sapiens

<400> 3318

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			20					25					30		
Glu	Lys	Arg	Glu	Glu	Arg	Arg	Arg	Glu	Leu	Glu	Lys	Lys	Arg	Leu	

	35					40					45					
Arg	Glu	Glu	Glu	Lys	Arg	Arg	Arg	Arg	Glu	Glu	Glu	Arg	Cys	Lys	Lys	
	50					55					60					
Lys	Glu	Thr	Asp	Lys	Gln	Lys	Lys	Ile	Ala	Glu	Lys	Glu	Val	Arg	Ile	
65					70					75					80	
Lys	Leu	Leu	Lys	Lys	Pro	Glu	Lys	Gly	Glu	Glu	Pro	Thr	Thr	Glu	Lys	
				85					90					95		
Pro	Lys	Glu	Arg	Gly	Glu	Glu	Ile	Asp	Thr	Gly	Gly	Gly	Lys	Gln	Glu	
			100				105					110				
Ser	Cys	Ala	Pro	Gly	Ala	Val	Val	Lys	Ala	Arg	Pro	Met	Glu	Gly	Ser	
		115					120				125					
Leu	Glu	Glu	Pro	Gln	Glu	Thr	Ser	His	Ser	Gly	Ser	Asp	Lys	Glu	His	
	130					135				140						
Arg	Asp	Val	Glu	Arg	Ser	Gln	Glu	Gln	Glu	Ser	Glu	Ala	Gln	Arg	Tyr	
145				150					155						160	
His	Val	Asp	Asp	Gly	Arg	Arg	His	Arg	Ala	His	His	Glu	Pro	Glu	Arg	
				165				170				175				
Leu	Ser	Arg	Arg	Ser	Glu	Asp	Glu	Gln	Arg	Trp	Gly	Lys	Gly	Pro	Gly	
			180				185				190					
Gln	Asp	Arg	Gly	Lys	Lys	Gly	Ser	Gln	Asp	Ser	Gly	Ala	Pro	Gly	Glu	
	195					200					205					
Ala	Met	Glu	Arg	Leu	Gly	Arg	Ala	Gln	Arg	Cys	Asp	Asp	Ser	Pro	Ala	
	210					215				220						
Pro	Arg	Lys	Glu	Arg	Leu	Ala	Asn	Lys	Val	Phe	Ile	Lys	Pro	Lys	Lys	
225				230					235						240	
Lys	Asn	Val	Ser	Gly	Cys	Leu	Lys	Val	Gln	Ala	Ala	Cys				
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<210> 3319
<211> 1541
<212> DNA
<213> Homo sapiens
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<212> PRT

<213> Homo sapiens

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<213> Homo sapiens

<400> 3326
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His Gln Gln Gln Met Ala Pro Ser Thr Leu Ser Gln Gln Asn Arg Pro
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Thr Gln Asn Pro Pro Ala Gly Leu Met Ser Met Pro Asn Ala Leu Thr
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Glu Arg Glu Arg Ile Arg Met Arg Gln Glu Glu Leu Met Arg Gln Glu
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Ala Ala Leu Cys Arg Gln Leu Pro Met Glu Ala Glu Thr Leu Ala Pro
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Val Gln Ala Ala Val Asn Pro Pro Thr Met Thr Pro Asp Met Arg Ser
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Ser Arg Glu Gln Ser Thr Asp Ser Gly Leu Gly Leu Gly Cys Tyr Ser
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Thr Arg Phe Pro Asp Phe Leu Asp Cys Leu Pro Gly Thr Asn Val Asp
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<210> 3327
<211> 2263
<212> DNA
<213> Homo sapiens

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<211> 521

<212> PRT

<213> Homo sapiens

<400> 3328

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Asp	Val	Glu	Arg	Glu	Gly	Leu	Asp	Trp	Asp	Leu	Ile	Tyr	Val	Gly	Arg
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Val	Lys	Thr	Asp	Trp	Asp	Arg	Ala	Lys	Ser	Gln	Lys	Met	Arg	Glu	Gln
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Gln	Ala	Leu	Ser	Arg	Glu	Ala	Lys	Asn	Ser	Asp	Val	Leu	Gln	Ser	Pro
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<210> 3329

<211> 705

<212> DNA

<213> Homo sapiens

<400> 3329

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420

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<212> PRT

<213> Homo sapiens

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<211> 1644

<212> DNA

<213> Homo sapiens

<400> 3331

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<211> 128

<212> PRT

<213> Homo sapiens

<400> 3332

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Asp	Leu	Asp	Pro	Asn	Asn	Val	Ser	Leu	Ser	Lys	Lys	Arg	Gly	Gly	Gly
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<210> 3333

<211> 2422

<212> DNA

<213> Homo sapiens

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<210> 3334
 <211> 672
 <212> PRT
 <213> Homo sapiens

<400> 3334
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 35 40 45
 His Met His His Val Arg Asp Arg Glu Met Pro Glu Ala Leu Glu Phe
 50 55 60
 Asn Leu Ser Ala Asn Pro Glu Ser Ser Thr Ile Phe Gln Arg Asn Ser
 65 70 75 80
 Gln Thr Glu Ala Leu Glu Phe Asn Pro Ser Ala Asn Pro Glu Ala Ser
 85 90 95
 Thr Ile Phe Gln Arg Asn Ser Gln Thr Asp Val Val Glu Ile Arg Arg
 100 105 110
 Ser Asn Cys Thr Asn His Val Ser Ala Val Arg Phe Ser Gln Gln Tyr
 115 120 125
 Ser Leu Cys Ser Thr Ile Phe Leu Asp Asp Ser Thr Ala Ile Gln His
 130 135 140
 Tyr Leu Thr Met Thr Ile Ile Ser Val Thr Leu Glu Ile Pro His His
 145 150 155 160
 Ile Thr Gln Arg Asp Ala Asp Arg Thr Leu Ser Ile Pro Asp Glu Gln
 165 170 175
 Leu His Ser Phe Ala Val Ser Thr Val His Ile Met Lys Lys Arg Asn
 180 185 190
 Gly Gly Gly Ser Leu Asn Asn Tyr Ser Ser Ser Ile Pro Ser Thr Pro
 195 200 205
 Ser Thr Ser Gln Glu Asp Pro Gln Phe Ser Val Pro Pro Thr Ala Asn
 210 215 220
 Thr Pro Thr Pro Val Cys Lys Arg Ser Met Arg Trp Ser Asn Leu Phe
 225 230 235 240
 Thr Ser Glu Lys Gly Ser His Pro Asp Lys Glu Arg Lys Ala Pro Glu
 245 250 255
 Asn His Ala Asp Thr Ile Gly Ser Gly Arg Ala Ile Pro Ile Lys Gln
 260 265 270
 Gly Met Leu Leu Lys Arg Ser Gly Lys Trp Leu Lys Thr Trp Lys Lys
 275 280 285
 Lys Tyr Val Thr Leu Cys Ser Asn Gly Met Leu Thr Tyr Tyr Ser Ser
 290 295 300
 Leu Gly Asp Tyr Met Lys Asn Ile His Lys Lys Glu Ile Asp Leu Gln
 305 310 315 320
 Thr Ser Thr Ile Lys Val Pro Gly Lys Trp Pro Ser Leu Ala Thr Ser

				325					330					335	
Ala	Cys	Thr	Pro	Ile	Ser	Ser	Ser	Lys	Ser	Asn	Gly	Leu	Ser	Lys	Asp
			340					345					350		
Met	Asp	Thr	Gly	Leu	Gly	Asp	Ser	Ile	Cys	Phe	Ser	Pro	Ser	Ile	Ser
		355					360					365			
Ser	Thr	Thr	Ser	Pro	Lys	Leu	Asn	Pro	Pro	Pro	Ser	Pro	His	Ala	Asn
	370					375					380				
Lys	Lys	Lys	His	Leu	Lys	Lys	Lys	Ser	Thr	Asn	Asn	Phe	Met	Ile	Val
385					390					395					400
Ser	Ala	Thr	Gly	Gln	Thr	Trp	His	Phe	Glu	Ala	Thr	Thr	Tyr	Glu	Glu
			405					410						415	
Arg	Asp	Ala	Trp	Val	Gln	Ala	Ile	Gln	Ser	Gln	Ile	Leu	Ala	Ser	Leu
		420						425				430			
Gln	Ser	Cys	Glu	Ser	Ser	Lys	Ser	Lys	Ser	Gln	Leu	Thr	Ser	Gln	Ser
	435						440					445			
Glu	Ala	Met	Ala	Leu	Gln	Ser	Ile	Gln	Asn	Met	Arg	Gly	Asn	Ala	His
	450					455					460				
Cys	Val	Asp	Cys	Glu	Thr	Gln	Asn	Pro	Lys	Trp	Ala	Ser	Leu	Asn	Leu
465					470					475					480
Gly	Val	Leu	Met	Cys	Ile	Glu	Cys	Ser	Gly	Ile	His	Arg	Ser	Leu	Gly
			485						490					495	
Thr	Arg	Leu	Ser	Arg	Val	Arg	Ser	Leu	Glu	Leu	Asp	Asp	Trp	Pro	Val
		500						505					510		
Glu	Leu	Arg	Lys	Val	Met	Ser	Ser	Ile	Gly	Asn	Glu	Leu	Ala	Asn	Ser
	515						520					525			
Ile	Trp	Glu	Glu	Ser	Ser	Gln	Gly	Arg	Thr	Lys	Pro	Ser	Val	Asp	Ser
	530					535					540				
Thr	Arg	Glu	Glu	Lys	Glu	Arg	Trp	Ile	Arg	Ser	Lys	Tyr	Glu	Glu	Lys
545					550					555					560
Leu	Phe	Leu	Ala	Pro	Leu	Pro	Cys	Thr	Glu	Leu	Ser	Leu	Gly	Gln	Gln
			565						570					575	
Leu	Leu	Arg	Ala	Thr	Ala	Asp	Glu	Asp	Leu	Gln	Thr	Ala	Ile	Leu	Leu
		580						585					590		
Leu	Ala	His	Gly	Ser	Arg	Glu	Glu	Val	Asn	Glu	Thr	Cys	Gly	Glu	Gly
	595						600					605			
Asp	Gly	Cys	Thr	Ala	Leu	His	Leu	Ala	Cys	Arg	Lys	Gly	Asn	Val	Val
	610					615					620				
Leu	Ala	Gln	Leu	Leu	Ile	Trp	Tyr	Gly	Val	Asp	Val	Met	Ala	Arg	Asp
625					630					635					640
Ala	His	Gly	Asn	Thr	Ala	Leu	Thr	Tyr	Ala	Arg	Gln	Ala	Ser	Ser	Gln
			645						650					655	
Glu	Cys	Ile	Asn	Val	Leu	Leu	Gln	Tyr	Gly	Cys	Pro	Asp	Lys	Cys	Val
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<210> 3335

<211> 477

<212> DNA

<213> Homo sapiens

<400> 3335

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120

cccagactgc ttgttgaagg ggttgagggtg ggcctgccgg aaacggggcca gcttctcatc
 180
 atattccata gcatcccacc tgcattgcct gccagggccc aggggctcgc agggacagga
 240
 tggccattcc tctagggctg ctggccacgg aagcctggcc gtgggttcgg cacctgctga
 300
 ccgcccctc gcatttgccc tgagacaggg ctggacagcc aggattaccg ctgtgccgag
 360
 tgccggggcg ccatctctct gcgggggtgtg cccagtggag ccaggcagtg cgactacacc
 420
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<210> 3336

<211> 59

<212> PRT

<213> Homo sapiens

<400> 3336

Pro	Pro	Pro	Arg	Ile	Cys	Pro	Glu	Thr	Gly	Leu	Asp	Ser	Gln	Asp	Tyr
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Arg	Cys	Ala	Glu	Cys	Arg	Ala	Pro	Ile	Ser	Leu	Arg	Gly	Val	Pro	Ser
			20					25					30		
Glu	Ala	Arg	Gln	Cys	Asp	Tyr	Thr	Gly	Gln	Tyr	Tyr	Cys	Ser	Pro	Cys
			35					40				45			
His	Trp	Asn	Ala	Leu	Ala	Val	Ile	Pro	Ala	Arg					
	50					55									

<210> 3337

<211> 679

<212> DNA

<213> Homo sapiens

<400> 3337

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 aaaaagagaa agagagacac cccacagaga ggggggaagg aggttagatg gggcagtcct
 120
 agcttagcct ccaaagacac agatagagtg agagagagag acagagagag acacagagac
 180
 agacagagac caaaacagaa gcggcaaacy gcaaaaacga agcagaatca atgcaagtta
 240
 gagaaaaaaaa taaaactaaa catcagagca gggaaaagtc atctactccg tatcacacct
 300
 gtgtattagc ttaaccagaa ataagctgga agaggagtgc agtagcctct cagcccccta
 360
 aagatgttgg tcataccccc tctttcaccg tctgagtcga gaggacacca agccaaacaa
 420
 actgtgcccc aaactgggtc atctagtcct cccaggtcct tccttgctaa ctcgaggaaa
 480
 caaggaaaac caactttgga tggcaacttc aacaaggtaa ccctcctttc ttcaatggcc
 540
 agactgatgc ccactgacaa tggctttgag atgcttggac agcagactgt catgtcaaga
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ctgcccagac cccaccaca ctgtggaaaa gggcagcacc agaccactg gagatgaggg
 660
 tcttgagcca agtgctagc
 679

<210> 3338
 <211> 102
 <212> PRT
 <213> Homo sapiens

<400> 3338
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 20 25 30
 Lys Glu Val Arg Trp Gly Ser Leu Ser Leu Ala Ser Lys Asp Thr Asp
 35 40 45
 Arg Val Arg Glu Arg Asp Arg Glu Arg His Arg Asp Arg Gln Arg Pro
 50 55 60
 Lys Gln Lys Arg Gln Thr Ala Lys Thr Lys Gln Asn Gln Cys Lys Leu
 65 70 75 80
 Glu Lys Lys Ile Lys Leu Asn Ile Arg Ala Gly Lys Ser His Leu Leu
 85 90 95
 Arg Ile Thr Pro Val Tyr
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<210> 3339
 <211> 1341
 <212> DNA
 <213> Homo sapiens

<400> 3339
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 180
 tctgggtatct gaagaaaaga tacacattta atatgttcat ttaagttacg tattttgcag
 240
 aaagattaaa aattcattca cacaaaactc aaaaactgta ttaaaaagttt gaatataaaa
 300
 ctcagatcca cctggaatga ctaaagaatg gaagttctgt atccacctgt gttaaaactg
 360
 gtaaatgtaa tgatatctgt taccaataaaa acgcattcgt ttattcaatg taagtaagtt
 420
 atctaatttt aacaatatgg caccctaaaa accaactgta tttttatgat gaggcacttt
 480
 tgttagtgat gaaacaaaaa gaacaaattt gctgcacact gatgccagcg attttcttca
 540
 gtgatttttg gtatatgcta tgtagtaagt tgcaacaaat accttgctca tttgtataca
 600
 actatccgat atattttttaa tatatatata tatatatgtt cttctggctg tagtaatgca
 660

ctgtaaagct atttcacagt gcaaaatgat gaaaccagcc caaatgaagg ctgcataata
 720
 acaattctga tacaagaaaa tattgacaga gttactggaa cgtgtaacag tagttttttt
 780
 acttgctaga gtggacatac cccagttta aagacagggg tgaaactctg ctttagtgcc
 840
 tggggtttca gacagtttat gaggttgggc attcgctgca gaactagcat ttttgctcac
 900
 gttctggaag ctttctccgt ttatttggtc aggtgactgt ggtggatatgg aaagaagggg
 960
 cctgtttggt gaagccaagg tgctggaaga actgcctgtg ttgcaatgaa gagacaaagg
 1020
 tgtgtcgggc gtggctatct ctcggtgctt tgggttctct gtctggggat ctccgatttc
 1080
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 1140
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 1200
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 tctgtgccct cctagtgtat gtctgcgcgc gatgcttttc cttttagcag tctcggcatt
 1320
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 1341

<210> 3340

<211> 86

<212> PRT

<213> Homo sapiens

<400> 3340

Met	Ser	Thr	Leu	Ala	Ser	Lys	Lys	Thr	Thr	Val	Thr	Arg	Ser	Ser	Asn
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Ser	Val	Asn	Ile	Phe	Leu	Tyr	Gln	Asn	Cys	Tyr	Tyr	Ala	Ala	Phe	Ile
		20					25					30			
Trp	Ala	Gly	Phe	Ile	Ile	Leu	His	Cys	Glu	Ile	Ala	Leu	Gln	Cys	Ile
		35				40					45				
Thr	Thr	Ala	Arg	Arg	Thr	Tyr	Ile	Tyr	Ile	Tyr	Ile	Lys	Asn	Ile	Ser
	50				55				60						
Asp	Ser	Cys	Ile	Gln	Met	Ser	Lys	Val	Phe	Val	Ala	Thr	Tyr	Tyr	Ile
65				70				75						80	
Ala	Tyr	Thr	Gln	Asn	His										
				85											

<210> 3341

<211> 1132

<212> DNA

<213> Homo sapiens

<400> 3341

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 agctggaggc accaggtctg aattccagac tctccccac caccacact tcacctccaa
 120

ctggagcatg accacagacc cattcagga ggctggcgga ctcttcatcc tggacagtcc
 180
 cttactgtat gtcaagtaaa gctgagaatg aagcggagag catcagacag aggagctggg
 240
 gaaacgtcgg ccagggccaa ggctctagga agtgggattt ctggaaataa tgcaaagaga
 300
 gctggaccat tcatccttgg tccccgtctg ggcaactcac cggtgccaag catagtgcag
 360
 tgtttggcga ggaaagatgg cacggatgac ttctatcagc tgaagatcct gaccctggag
 420
 gagagggggg accaaggcat agagagccag gaagagcggc agggcaagat gctgctgcac
 480
 accgagtact cactgctgtc tctcctgcac acgcaggatg gcgtggtgca ccaccacggc
 540
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 600
 aagatgaaga agcgcactct cctcgtcctg gactgcctct gtgctcatga cttcagcgat
 660
 aagaccgctg acctcatcaa cctgcagcac tacgtcatca aggagaagag gctcagcgag
 720
 agggagactg tggtaatctt ctacgacgtg gtccgctggg tggaggccct gcaccagaaa
 780
 aatatcgtgc acagagacct gaagctgggg aacatggtgc tcaacaagag gacacatcgg
 840
 ataaccatca ccaacttctg cctcggaag catctggtga gcgaggggga cctgctgaag
 900
 gaccagagag ggagccctgc ctacatcagt cccgacgtgc tcagcggccg gccgtaccgt
 960
 ggcaagccca gtgacatgtg ggccctgggc gtggtgctct tcaccatgct gtatggccag
 1020
 ttcccccttct acgacagcat cccgcaggag ctcttccgca agatcaaggc tgccgagtat
 1080
 accattcctg aggatggacg ggtttctgag aacaccgtgt gtctcatccg ga
 1132

<210> 3342

<211> 308

<212> PRT

<213> Homo sapiens

<400> 3342

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Ala	Lys	Ala	Leu	Gly	Ser	Gly	Ile	Ser	Gly	Asn	Asn	Ala	Lys	Arg	Ala
			20					25					30		
Gly	Pro	Phe	Ile	Leu	Gly	Pro	Arg	Leu	Gly	Asn	Ser	Pro	Val	Pro	Ser
		35					40					45			
Ile	Val	Gln	Cys	Leu	Ala	Arg	Lys	Asp	Gly	Thr	Asp	Asp	Phe	Tyr	Gln
	50					55					60				
Leu	Lys	Ile	Leu	Thr	Leu	Glu	Glu	Arg	Gly	Asp	Gln	Gly	Ile	Glu	Ser
65					70					75				80	
Gln	Glu	Glu	Arg	Gln	Gly	Lys	Met	Leu	Leu	His	Thr	Glu	Tyr	Ser	Leu
			85					90						95	
Leu	Ser	Leu	Leu	His	Thr	Gln	Asp	Gly	Val	Val	His	His	His	Gly	Leu

			100					105					110				
Phe	Gln	Asp	Arg	Thr	Cys	Glu	Ile	Val	Glu	Asp	Thr	Glu	Ser	Ser	Arg		
		115						120					125				
Met	Val	Lys	Lys	Met	Lys	Lys	Arg	Ile	Cys	Leu	Val	Leu	Asp	Cys	Leu		
		130					135					140					
Cys	Ala	His	Asp	Phe	Ser	Asp	Lys	Thr	Ala	Asp	Leu	Ile	Asn	Leu	Gln		
145					150				155					160			
His	Tyr	Val	Ile	Lys	Glu	Lys	Arg	Leu	Ser	Glu	Arg	Glu	Thr	Val	Val		
			165					170					175				
Ile	Phe	Tyr	Asp	Val	Val	Arg	Val	Val	Glu	Ala	Leu	His	Gln	Lys	Asn		
			180				185					190					
Ile	Val	His	Arg	Asp	Leu	Lys	Leu	Gly	Asn	Met	Val	Leu	Asn	Lys	Arg		
		195				200					205						
Thr	His	Arg	Ile	Thr	Ile	Thr	Asn	Phe	Cys	Leu	Gly	Lys	His	Leu	Val		
		210				215					220						
Ser	Glu	Gly	Asp	Leu	Leu	Lys	Asp	Gln	Arg	Gly	Ser	Pro	Ala	Tyr	Ile		
225					230				235					240			
Ser	Pro	Asp	Val	Leu	Ser	Gly	Arg	Pro	Tyr	Arg	Gly	Lys	Pro	Ser	Asp		
			245					250				255					
Met	Trp	Ala	Leu	Gly	Val	Val	Leu	Phe	Thr	Met	Leu	Tyr	Gly	Gln	Phe		
		260				265					270						
Pro	Phe	Tyr	Asp	Ser	Ile	Pro	Gln	Glu	Leu	Phe	Arg	Lys	Ile	Lys	Ala		
		275				280					285						
Ala	Glu	Tyr	Thr	Ile	Pro	Glu	Asp	Gly	Arg	Val	Ser	Glu	Asn	Thr	Val		
		290				295					300						
Cys	Leu	Ile	Arg														
305																	

<210> 3343

<211> 594

<212> DNA

<213> Homo sapiens

<400> 3343

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120

ttcagcatga actgggtcgt gggcagcgcg gacctggaga ttatcaacgc caccactggg
180

cggaggagct gtgggggccc atcccggctc tgcaagcacg tgctgtctgc acggtgggcg
240

cggctgtatg gcaggctgag cacacggaca ccagccctg gagacacgcc ctccatgtac
300

tgtgaggcca agctgggggc gcacacctac cagtctgtga aacagcagct gttcaaggcc
360

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420

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480

gaccgtgtct ggggggacac gtggcgggtc ggccggttcc ctgcattcgt tttactttgg
540

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594

<210> 3344
 <211> 143
 <212> PRT
 <213> Homo sapiens

<400> 3344
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 Arg Gln Pro Gly Lys Ser Pro Pro Phe Ser Met Asn Trp Val Val Gly
 35 40 45
 Ser Ala Asp Leu Glu Ile Ile Asn Ala Thr Thr Gly Arg Arg Ser Cys
 50 55 60
 Gly Gly Pro Ser Arg Leu Cys Lys His Val Leu Ser Ala Arg Trp Ala
 65 70 75 80
 Arg Leu Tyr Gly Arg Leu Ser Thr Arg Thr Pro Ser Pro Gly Asp Thr
 85 90 95
 Pro Ser Met Tyr Cys Glu Ala Lys Leu Gly Ala His Thr Tyr Gln Ser
 100 105 110
 Val Lys Gln Gln Leu Phe Lys Ala Phe Gln Lys Ala Gly Leu Gly Thr
 115 120 125
 Trp Val Arg Lys Pro Pro Glu Gln Gln Gln Phe Leu Leu Thr Leu
 130 135 140

<210> 3345
 <211> 1149
 <212> DNA
 <213> Homo sapiens

<400> 3345
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 120
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 180
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 240
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 420
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 480
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 540
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 660

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<210> 3346

<211> 263

<212> PRT

<213> Homo sapiens

<400> 3346

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Pro	Phe	Asn	Lys	Gln	Ser	Gly	Pro	Arg	Gln	His	Glu	Gln	Gly	Pro	Gly
		20						25					30		
Glu	Glu	Val	Pro	Asp	Val	Thr	Pro	Glu	Glu	Ala	Leu	Pro	Glu	Leu	Pro
		35					40					45			
Pro	Gly	Glu	Pro	Glu	Phe	Arg	Cys	Pro	Glu	Arg	Val	Met	Asp	Leu	Gly
	50					55					60				
Leu	Ser	Glu	Asp	His	Phe	Ser	Arg	Pro	Val	Gly	Leu	Phe	Leu	Ala	Ser
65				70					75					80	
Asp	Val	Gln	Gln	Leu	Arg	Gln	Ala	Ile	Glu	Glu	Cys	Lys	Gln	Val	Ile
			85					90						95	
Leu	Glu	Leu	Pro	Glu	Gln	Ser	Glu	Lys	Gln	Lys	Asp	Ala	Val	Val	Arg
		100						105					110		
Leu	Ile	His	Leu	Arg	Leu	Lys	Leu	Gln	Glu	Leu	Lys	Asp	Pro	Asn	Glu
	115					120						125			
Asp	Glu	Pro	Asn	Ile	Arg	Val	Leu	Leu	Glu	His	Arg	Phe	Tyr	Lys	Glu
	130					135					140				
Lys	Ser	Lys	Ser	Val	Lys	Gln	Thr	Cys	Asp	Lys	Cys	Asn	Thr	Ile	Ile
145				150					155					160	
Trp	Gly	Leu	Ile	Gln	Thr	Trp	Tyr	Thr	Cys	Thr	Gly	Cys	Tyr	Tyr	Arg
			165					170						175	
Cys	His	Ser	Lys	Cys	Leu	Asn	Leu	Ile	Ser	Lys	Pro	Cys	Val	Ser	Ser
		180					185						190		
Lys	Val	Ser	His	Gln	Ala	Glu	Tyr	Glu	Leu	Asn	Ile	Cys	Pro	Glu	Thr
	195						200					205			
Gly	Leu	Asp	Ser	Gln	Asp	Tyr	Arg	Cys	Ala	Glu	Cys	Arg	Ala	Pro	Ile
	210					215					220				
Ser	Leu	Arg	Gly	Val	Pro	Ser	Glu	Ala	Arg	Gln	Cys	Asp	Tyr	Thr	Gly

225		230		235		240
Gln Tyr Tyr Cys Ser His Cys His Trp Asn Asp Leu Ala Val Ile Pro						
		245		250		255
Glu Ala Gly Val Cys Ser Arg						
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<210> 3347

<211> 2267

<212> DNA

<213> Homo sapiens

<400> 3347

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120
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 <211> 288
 <212> PRT
 <213> Homo sapiens

<400> 3348
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 35 40 45
 Leu Pro Gly Pro Thr Leu Ala Phe Leu Val Leu Ser Thr Pro Ala Met
 50 55 60
 Phe Asp Arg Ala Leu Lys Pro Phe Leu Gln Ser Cys His Leu Arg Met
 65 70 75 80
 Leu Thr Asp Pro Val Asp Gln Cys Val Ala Tyr His Leu Gly Arg Val
 85 90 95
 Gly Glu Ser Leu Pro Glu Leu Gln Ile Glu Ile Ile Ala Asp Tyr Glu
 100 105 110

Val His Pro Asn Arg Arg Pro Lys Ile Leu Ala Gln Thr Ala Ala His
 115 120 125
 Val Ala Gly Ala Ala Tyr Tyr Tyr Gln Arg Gln Asp Val Glu Ala Asp
 130 135 140
 Pro Trp Gly Asn Gln Arg Ile Ser Gly Val Cys Ile His Pro Arg Phe
 145 150 155 160
 Gly Gly Trp Phe Ala Ile Arg Gly Val Val Leu Leu Pro Gly Ile Glu
 165 170 175
 Val Pro Asp Leu Pro Pro Arg Lys Pro His Asp Cys Val Pro Thr Arg
 180 185 190
 Ala Asp Arg Ile Ala Leu Leu Glu Gly Phe Asn Phe His Trp Arg Asp
 195 200 205
 Trp Thr Tyr Arg Asp Ala Val Thr Pro Gln Glu Arg Tyr Ser Glu Glu
 210 215 220
 Gln Lys Ala Tyr Phe Ser Thr Pro Pro Ala Gln Arg Leu Ala Leu Leu
 225 230 235 240
 Gly Leu Ala Gln Pro Ser Glu Lys Pro Ser Ser Pro Ser Pro Asp Leu
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<210> 3349

<211> 1132

<212> DNA

<213> Homo sapiens

<400> 3349

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 240
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 420
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 480
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 720

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 1020
 ccagtacttg cctcattctc atcatccaaa ctgaacattt gtatcccaag cagaaataaa
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<210> 3350
 <211> 174
 <212> PRT
 <213> Homo sapiens

<400> 3350
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 Gln Gly Leu Ala Val Tyr Ala Ser Pro Glu Asn Lys Lys Leu Phe Glu
 35 40 45
 Glu Glu Lys Leu Leu Arg Gln Glu Gly Lys Leu Glu Lys Ile Gln Thr
 50 55 60
 Lys Ala Gly Glu Ala Thr Val Lys Phe Leu Lys Ser Cys Arg Leu Glu
 65 70 75 80
 Val Gly Met Lys Asn Asn Val Lys Trp Glu Leu Asn Pro Glu Ile Val
 85 90 95
 Ala Arg His Phe Phe Lys Asn Leu Gly Val Val Val Ala Pro His Thr
 100 105 110
 Leu Lys Leu Pro Ala Glu Pro Ile Thr Arg Trp Gly Glu Tyr Trp Cys
 115 120 125
 Glu Val Thr Val Asn Gly Leu Asp Thr Val Arg Val Pro Met Ser Val
 130 135 140
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 Gln Gln Ala Ala Lys Ala Met Ala Pro Thr Ser Pro Gln Ile
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<210> 3351
 <211> 1422
 <212> DNA
 <213> Homo sapiens

<400> 3351
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<210> 3352

<211> 97

<212> PRT

<213> Homo sapiens

<400> 3352

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5

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15

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<212> DNA
<213> Homo sapiens
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240
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<212> PRT
<213> Homo sapiens
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Leu Pro Pro Ala Met Asn Thr Gly Gly Ser Leu Pro Asp Leu Thr Asn
          35          40          45
Leu His Phe Pro Pro Pro Leu Pro Thr Pro Leu Asp Pro Glu Glu Thr
          50          55          60
Ala Tyr Pro Ser Leu Ser Gly Gly Asn Ser Thr Ser Asn Leu Thr His
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Thr Met Thr His Leu Gly Ile Ser Arg Gly Met Gly Leu Gly Pro Gly
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Tyr Asp Ala Pro Gly Arg Pro Pro Gly Tyr Gln
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<210> 3355
 <211> 474
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 <213> Homo sapiens

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 180
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 360
 aatattgaga ttttagaaga ccaaataaga gctcgagatc aggcgggccac aggaactaac
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<210> 3356
 <211> 131
 <212> PRT
 <213> Homo sapiens

<400> 3356
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 35 40 45
 Ala Phe Arg Ile Lys Glu Asp Ile Ser Ala Cys Leu Gln Gly Thr His
 50 55 60
 Gly Phe Arg Lys Glu Glu Ser Leu Ala Arg Lys Leu Leu Glu Ser His
 65 70 75 80
 Ile Gln Thr Ile Thr Ser Ile Val Lys Lys Leu Ser Gln Asn Ile Glu
 85 90 95
 Ile Leu Glu Asp Gln Ile Arg Ala Arg Asp Gln Ala Ala Thr Gly Thr
 100 105 110
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 Arg Ser Phe
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<210> 3357
 <211> 2268
 <212> DNA
 <213> Homo sapiens

<400> 3357

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 tagcatgcag attgaagata aaactttcca agtccttggt aatctttaca gcgagggaga
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 2268

<210> 3358

<211> 493

<212> PRT

<213> Homo sapiens

<400> 3358

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Ser	Tyr	Leu	Ser	Met	Glu	Lys	Ile	Ile	Gln	Val	Ala	Lys	Thr	Ser	Ala
		35					40					45			
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Phe	Ala	Glu	Leu	Cys	Lys	Gln	Glu	Gly	Ile	Ile	Phe	Ile	Gly	Pro	Pro
65					70				75					80	
Pro	Ser	Ala	Ile	Arg	Asp	Met	Gly	Ile	Lys	Ser	Thr	Ser	Lys	Ser	Ile
				85					90					95	
Met	Ala	Ala	Ala	Gly	Val	Pro	Val	Val	Glu	Gly	Tyr	His	Gly	Glu	Asp
			100					105					110		
Gln	Ser	Asp	Gln	Cys	Leu	Lys	Glu	His	Ala	Arg	Arg	Ile	Gly	Tyr	Pro
		115					120					125			
Val	Met	Ile	Lys	Ala	Val	Arg	Gly	Gly	Gly	Gly	Lys	Gly	Met	Arg	Ile
	130					135						140			
Val	Arg	Ser	Glu	Gln	Glu	Phe	Gln	Glu	Gln	Leu	Glu	Ser	Ala	Arg	Arg
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Glu	Ala	Lys	Lys	Ser	Phe	Asn	Asp	Asp	Ala	Met	Leu	Ile	Glu	Lys	Phe
			165						170					175	
Val	Asp	Thr	Pro	Arg	His	Val	Glu	Val	Gln	Val	Phe	Gly	Asp	His	His
			180				185						190		
Gly	Asn	Ala	Val	Tyr	Leu	Phe	Glu	Arg	Asp	Cys	Ser	Val	Gln	Arg	Arg

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His	Gln	Lys	Ile	Ile	Glu	Glu	Ala	Pro	Ala	Pro	Gly	Ile	Lys	Ser	Glu
	210					215					220				
Val	Arg	Lys	Lys	Leu	Gly	Glu	Ala	Ala	Val	Arg	Ala	Ala	Lys	Ala	Val
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Asn	Tyr	Val	Gly	Ala	Gly	Thr	Val	Glu	Phe	Ile	Met	Asp	Ser	Lys	His
				245					250					255	
Asn	Phe	Cys	Phe	Met	Glu	Met	Asn	Thr	Arg	Leu	Gln	Val	Glu	His	Pro
			260					265					270		
Val	Thr	Glu	Met	Ile	Thr	Gly	Thr	Asp	Leu	Val	Glu	Trp	Gln	Leu	Arg
	275					280						285			
Ile	Ala	Ala	Gly	Glu	Lys	Ile	Pro	Leu	Ser	Gln	Glu	Glu	Ile	Thr	Leu
290					295						300				
Gln	Gly	His	Ala	Phe	Glu	Ala	Arg	Ile	Tyr	Ala	Glu	Asp	Pro	Ser	Asn
305					310				315						320
Asn	Phe	Met	Pro	Val	Ala	Gly	Pro	Leu	Val	His	Leu	Ser	Thr	Pro	Arg
			325					330						335	
Ala	Asp	Pro	Ser	Thr	Arg	Ile	Glu	Thr	Gly	Val	Arg	Gln	Gly	Asp	Glu
			340					345					350		
Val	Ser	Val	His	Tyr	Asp	Pro	Met	Ile	Ala	Lys	Leu	Val	Val	Trp	Ala
	355				360						365				
Ala	Asp	Arg	Gln	Ala	Ala	Leu	Thr	Lys	Leu	Arg	Tyr	Ser	Leu	Arg	Gln
370					375						380				
Tyr	Asn	Ile	Val	Gly	Leu	His	Thr	Asn	Ile	Asp	Phe	Leu	Leu	Asn	Leu
385					390				395						400
Ser	Gly	His	Pro	Glu	Phe	Glu	Ala	Gly	Asn	Val	His	Thr	Asp	Phe	Ile
			405					410					415		
Pro	Gln	His	His	Lys	Gln	Leu	Leu	Leu	Ser	Arg	Lys	Ala	Ala	Ala	Lys
			420					425					430		
Glu	Ser	Leu	Cys	Gln	Ala	Ala	Leu	Gly	Leu	Ile	Leu	Lys	Glu	Lys	Ala
	435						440				445				
Met	Thr	Asp	Thr	Phe	Thr	Leu	Gln	Ala	His	Asp	Gln	Phe	Ser	Pro	Phe
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Ser	Ser	Ser	Ser	Gly	Arg	Arg	Leu	Asn	Ile	Ser	Tyr	Thr	Arg	Asn	Met
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<210> 3359

<211> 652

<212> DNA

<213> Homo sapiens

<400> 3359

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120
ggctagacag ttactgtctc agctctagga tgtgcgttct tccactagaa gctcttctga
180
gggaggtaat taaaaaacag tggaatggaa aaacagtgtc gtagtcatcc tgtaatatgc
240
tccttgtaaa caatgtatac attcctgcta ggtgccatat tcattgcttt aagctcaagt
300

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cgcacattac tagtgaagta ttctgccaat gaagaaaaca agtatgatta tcttccaact
 360
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 420
 gttataaaga aagatcatca aagtagaaat ttgaaatatg cttcctggaa ggaattctct
 480
 gatttcatga agtgggtccat tctgacctt ctttatttcc tggataactt gattgtcttc
 540
 tatgtcctgt cctatcttca accagccatg gctgttatct tctcaaattt tagcattata
 600
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<210> 3360

<211> 149

<212> PRT

<213> Homo sapiens

<400> 3360

Met	Glu	Lys	Gln	Cys	Cys	Ser	His	Pro	Val	Ile	Cys	Ser	Leu	Ser	Thr
1				5					10					15	
Met	Tyr	Thr	Phe	Leu	Leu	Gly	Ala	Ile	Phe	Ile	Ala	Leu	Ser	Ser	Ser
			20					25					30		
Arg	Ile	Leu	Leu	Val	Lys	Tyr	Ser	Ala	Asn	Glu	Glu	Asn	Lys	Tyr	Asp
			35				40					45			
Tyr	Leu	Pro	Thr	Thr	Val	Asn	Val	Cys	Ser	Glu	Leu	Val	Lys	Leu	Val
			50			55					60				
Phe	Cys	Val	Leu	Val	Ser	Phe	Cys	Val	Ile	Lys	Lys	Asp	His	Gln	Ser
65					70					75				80	
Arg	Asn	Leu	Lys	Tyr	Ala	Ser	Trp	Lys	Glu	Phe	Ser	Asp	Phe	Met	Lys
			85					90					95		
Trp	Ser	Ile	Pro	Ala	Phe	Leu	Tyr	Phe	Leu	Asp	Asn	Leu	Ile	Val	Phe
			100					105					110		
Tyr	Val	Leu	Ser	Tyr	Leu	Gln	Pro	Ala	Met	Ala	Val	Ile	Phe	Ser	Asn
			115				120					125			
Phe	Ser	Ile	Ile	Thr	Thr	Ala	Leu	Leu	Phe	Arg	Ile	Val	Leu	Lys	Arg
			130			135					140				
Arg	Leu	Asn	Trp	Ile											
145															

<210> 3361

<211> 1040

<212> DNA

<213> Homo sapiens

<400> 3361

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 120
 ggagtcgcct gcgcgcgcag cggaggccag tgcgcggcg catagcgagc ccgggtctgt
 180
 gatcgccgag gcgggagtg agatagtcca agtcctaaga gacagcgct ctctcattca
 240

gtctttgatt atacatcagc atcaccagct ccctcaccac caatgcgacc atgggagatg
 300
 acatcaaata ggcagcccc ttcagttcga ccaagccaac atcacttctc aggggaacga
 360
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 420
 gatcgtctgt ctgcacataa ttccattagt caagatgaaa actatcacca tctcccttac
 480
 gcacagcagc aagcaataga ggagcctcga gccttccacc ctccgaatgt atctccccgt
 540
 ctgctacatc ctgctgctca tccaccccag cagaatgcag tcatggttga catacatgat
 600
 cagctccatc aaggaacagt ccctgtttct tacacagtaa caacagtggc accacatggg
 660
 attccactct gcacaggcca gcacatccct gctttagtagta cacagcaggt cccaggatgc
 720
 tctgtggttt tcagtggaca gcacctccct gtctgtagtg tgccctctcc aatgcttcag
 780
 gcatgttcag ttcagcactt accagtacca tatgctgcat tcccaccct tatttctagt
 840
 gatccatttc ttatacatcc tctcacctt tctcccatc atcctctca tttgccacca
 900
 ccaggccagt ttgtcccttt ccaaacacag caatcacgat cgcctctgca aaggatagaa
 960
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 1020
 ttaataaata tctcaactcc
 1040

<210> 3362

<211> 252

<212> PRT

<213> Homo sapiens

<400> 3362

Met	Arg	Pro	Trp	Glu	Met	Thr	Ser	Asn	Arg	Gln	Pro	Pro	Ser	Val	Arg
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Pro	Ser	Gln	His	His	Phe	Ser	Gly	Glu	Arg	Cys	Asn	Thr	Pro	Ala	Arg
			20					25					30		
Asn	Arg	Arg	Ser	Pro	Pro	Val	Arg	Arg	Gln	Arg	Gly	Arg	Arg	Asp	Arg
			35					40					45		
Leu	Ser	Arg	His	Asn	Ser	Ile	Ser	Gln	Asp	Glu	Asn	Tyr	His	His	Leu
			50					55					60		
Pro	Tyr	Ala	Gln	Gln	Gln	Ala	Ile	Glu	Glu	Pro	Arg	Ala	Phe	His	Pro
						70				75					80
Pro	Asn	Val	Ser	Pro	Arg	Leu	Leu	His	Pro	Ala	Ala	His	Pro	Pro	Gln
					85				90					95	
Gln	Asn	Ala	Val	Met	Val	Asp	Ile	His	Asp	Gln	Leu	His	Gln	Gly	Thr
			100					105					110		
Val	Pro	Val	Ser	Tyr	Thr	Val	Thr	Thr	Val	Ala	Pro	His	Gly	Ile	Pro
			115					120					125		
Leu	Cys	Thr	Gly	Gln	His	Ile	Pro	Ala	Cys	Ser	Thr	Gln	Gln	Val	Pro
			130				135					140			
Gly	Cys	Ser	Val	Val	Phe	Ser	Gly	Gln	His	Leu	Pro	Val	Cys	Ser	Val

145		150		155		160									
Pro	Pro	Pro	Met	Leu	Gln	Ala	Cys	Ser	Val	Gln	His	Leu	Pro	Val	Pro
		165		170		175									
Tyr	Ala	Ala	Phe	Pro	Pro	Leu	Ile	Ser	Ser	Asp	Pro	Phe	Leu	Ile	His
		180		185		190									
Pro	Pro	His	Leu	Ser	Pro	His	His	Pro	Pro	His	Leu	Pro	Pro	Pro	Gly
		195		200		205									
Gln	Phe	Val	Pro	Phe	Gln	Thr	Gln	Gln	Ser	Arg	Ser	Pro	Leu	Gln	Arg
	210			215		220									
Ile	Glu	Asn	Glu	Val	Glu	Leu	Leu	Gly	Glu	His	Leu	Pro	Gly	Ala	His
225				230		235									240
Pro	Gln	His	Pro	His	Leu	Leu	Ile	Asn	Ile	Ser	Thr				
				245		250									

<210> 3363
 <211> 718
 <212> DNA
 <213> Homo sapiens

<400> 3363
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 120
 gtagctcagg agtgtctccg gagccactg gagaagcccc ccaacggcct cctcttcccc
 180
 cagcacgggg actatcagta cggccgcaac aacatctaaa cagaccactt ccaatacagc
 240
 cggcagagct acccaaactc gtacagtttg aaccgctatg atgtgtagag tccaaaggac
 300
 aggaccagac tgttggtgac tccttccccg gccccacag cagtatcaga aacttctgac
 360
 aatcagtga tgtacaacc agccgagggg acggtgcata actctccatc agaagccctg
 420
 ggggttcctg cccccctga gccgcaggag gatgcgttgc ctgcagtga gacggccgtg
 480
 agctctgggc aaacctaacc agagaccagt gtcccatgct ctttcttctt ggagcctgtc
 540
 atctgagggc cgtgtccctg cggagatctt ggccacgttg tacctttcca tgtggaatta
 600
 ttccccaaagc agtgtagctc agagcacttg tgtctgcatt ccagataaca ttcaggacct
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 718

<210> 3364
 <211> 163
 <212> PRT
 <213> Homo sapiens

<400> 3364
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 Ala Leu Gln Ala Thr His Pro Pro Ala Ala His Gly Gly Pro Gly Thr

	20		25		30										
Pro	Gly	Leu	Leu	Met	Glu	Ser	Tyr	Ala	Pro	Ser	Pro	Arg	Leu	Gly	Cys
	35		40		45										
Thr	Phe	Thr	Asp	Cys	Gln	Lys	Phe	Leu	Ile	Leu	Leu	Trp	Gly	Pro	Gly
	50		55		60										
Lys	Glu	Ser	Pro	Thr	Val	Trp	Ser	Cys	Pro	Leu	Asp	Ser	Thr	His	His
65			70		75									80	
Ser	Gly	Ser	Asn	Cys	Thr	Ser	Leu	Gly	Ser	Ser	Ala	Gly	Cys	Ile	Gly
			85		90									95	
Ser	Gly	Leu	Phe	Arg	Cys	Cys	Cys	Gly	Arg	Thr	Asp	Ser	Pro	Arg	Ala
			100		105									110	
Gly	Gly	Arg	Gly	Gly	Arg	Trp	Gly	Ala	Ser	Pro	Val	Gly	Ser	Gly	Asp
	115		120		125										
Thr	Pro	Glu	Leu	Leu	Gly	Arg	Gln	Cys	His	Pro	Lys	Asn	His	Gly	His
	130		135		140										
Asp	Gly	Val	Pro	Asp	His	Ala	Gly	Gln	Pro	Ile	Pro	His	His	Gln	Arg
145			150		155									160	
Ser	Trp	Ala													

<210> 3365

<211> 2389

<212> DNA

<213> Homo sapiens

<400> 3365

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120
tcgggtggca gcgccgggcg caacgcaggg gtcacggcga cggcggcggc ggctgacggc
180
tggaagggtg ggcttccttc accgctcgtc ctcttccttc gctccgctcg gtgtcaggcg
240
cggcggcggc gcggcgggcg gacttcgtcc ctctcctgc tccccccac accggagcgg
300
gcactcttcg ctctgccatc ccccgaccct tcaccccgag gactgggcgc ctctccggc
360
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420
cagaactgga actcgtcggg ctccgaggag gatccagaga cggagtctgg gccgcctgtg
480
gagcgtcgcg gggctcctcag taagtggaca aactacattc atgggtggca ggatcgttgg
540
gtagttttga aaaataatgc tctgagttac tacaaatctg aagatgaaac agagtatggc
600
tgcagaggat ccatctgtct tagcaaggct gtcacacac ctacagattt tgatgaatgt
660
cgatttgata ttagtgtaaa tgatagtgtt tggatatctc gtgctcagga tccagatcat
720
agacagcaat ggatagatgc cattgaacag cacaagactg aatctggata tggatctgaa
780
tccagcttgc gtcgacatgg ctcaatgggtg tccctgggtg ctggagcaag tggctactct
840

gcaacatcca cctcttcatt caagaaaggc cacagtttac gtgagaagtt ggctgaaatg
900
gaaacattta gagacatctt atgtagacaa gttgacacgc tacagaagta ctttgatgcc
960
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1020
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1080
gaaaagttat ttccacatgt gacaccaaaa ggaattaatg gtatagactt taaaggggaa
1140
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1200
ctaattggta aacgtgagga cagctggcag aagagactgg ataaggaaac tgagaagaaa
1260
agaagaacag aggaagcata taaaaatgca atgacagaac ttaagaaaaa atcccacttt
1320
ggaggaccag attatgaaga aggcctaac agtctgatta atgaagaaga gttctttgat
1380
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1440
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1500
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1560
agtgcctctg atgatgttca cagattcagc tcccagggtg aagagatggg gcagaaccac
1620
atgacttact cattacagga tgtaggcgga gatgccaat ggagttggg tgtagaagaa
1680
ggagaaatga aggtatacag aagagaagta gaagaaaatg ggattgttct ggatccttta
1740
aaagctaccc atgcagttaa aggcgtcaca ggacatgaag tctgcaatta tttctggaat
1800
gttgacgttc gcaatgactg ggaaacaact atagaaaact ttcattgtggg ggaaacatta
1860
gctgataatg caatcatcat ttatcaaaca cacaagaggg tgtggcctgc ttctcagcga
1920
gacgtattat atctttctgt cattcgaaag ataccagcct tgactgaaaa tgaccctgaa
1980
acttgatag tttgtaattt ttctgtggat catgacagtg ctctctaaa caaccgatgt
2040
gtccgtgcc aataaaatgt tgctatgatt tgtcaaact tggtaagccc accagagggg
2100
aaccaggaaa ttagcagggg caacattcta tgcaagatta catatgtagc taatgtgaac
2160
cctggaggat gggcaccagc ctgagtgtta agggcagtgg caaagcgaga gtatcctaaa
2220
tttctaaaac gttttacttc ttacgtccaa gaaaaaactg caggaaagcc tattttgttc
2280
tagtattaac aggtactaga agatatgttt tatctttttt taactttatt tgactaatat
2340
gactgtcaat actaaaattt agttgttgaa agtatttact atgtttttt
2389

<210> 3366

<211> 624

<212> PRT

<213> Homo sapiens

<400> 3366

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Met Ser Asp Asn Gln Asn Trp Asn Ser Ser Gly Ser Glu Glu Asp Pro
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Glu Thr Glu Ser Gly Pro Pro Val Glu Arg Cys Gly Val Leu Ser Lys
          20          25          30
Trp Thr Asn Tyr Ile His Gly Trp Gln Asp Arg Trp Val Val Leu Lys
          35          40          45
Asn Asn Ala Leu Ser Tyr Tyr Lys Ser Glu Asp Glu Thr Glu Tyr Gly
          50          55          60
Cys Arg Gly Ser Ile Cys Leu Ser Lys Ala Val Ile Thr Pro His Asp
65          70          75          80
Phe Asp Glu Cys Arg Phe Asp Ile Ser Val Asn Asp Ser Val Trp Tyr
          85          90          95
Leu Arg Ala Gln Asp Pro Asp His Arg Gln Gln Trp Ile Asp Ala Ile
          100          105          110
Glu Gln His Lys Thr Glu Ser Gly Tyr Gly Ser Glu Ser Ser Leu Arg
          115          120          125
Arg His Gly Ser Met Val Ser Leu Val Ser Gly Ala Ser Gly Tyr Ser
          130          135          140
Ala Thr Ser Thr Ser Ser Phe Lys Lys Gly His Ser Leu Arg Glu Lys
145          150          155          160
Leu Ala Glu Met Glu Thr Phe Arg Asp Ile Leu Cys Arg Gln Val Asp
          165          170          175
Thr Leu Gln Lys Tyr Phe Asp Ala Cys Ala Asp Ala Val Ser Lys Asp
          180          185          190
Glu Leu Gln Arg Asp Lys Val Val Glu Asp Asp Glu Asp Asp Phe Pro
          195          200          205
Thr Thr Arg Ser Asp Gly Asp Phe Leu His Ser Thr Asn Gly Asn Lys
          210          215          220
Glu Lys Leu Phe Pro His Val Thr Pro Lys Gly Ile Asn Gly Ile Asp
225          230          235          240
Phe Lys Gly Glu Ala Ile Thr Phe Lys Ala Thr Thr Ala Gly Ile Leu
          245          250          255
Ala Thr Leu Ser His Cys Ile Glu Leu Met Val Lys Arg Glu Asp Ser
          260          265          270
Trp Gln Lys Arg Leu Asp Lys Glu Thr Glu Lys Lys Arg Arg Thr Glu
          275          280          285
Glu Ala Tyr Lys Asn Ala Met Thr Glu Leu Lys Lys Lys Ser His Phe
          290          295          300
Gly Gly Pro Asp Tyr Glu Glu Gly Pro Asn Ser Leu Ile Asn Glu Glu
305          310          315          320
Glu Phe Phe Asp Ala Val Glu Ala Ala Leu Asp Arg Gln Asp Lys Ile
          325          330          335
Glu Glu Gln Ser Gln Ser Glu Lys Val Arg Leu His Trp Pro Thr Ser
          340          345          350
Leu Pro Ser Gly Asp Ala Phe Ser Ser Val Gly Thr His Arg Phe Val
          355          360          365
Gln Lys Pro Tyr Ser Arg Ser Ser Ser Met Ser Ser Ile Asp Leu Val
          370          375          380
Ser Ala Ser Asp Asp Val His Arg Phe Ser Ser Gln Val Glu Glu Met

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385          390          395          400
Val Gln Asn His Met Thr Tyr Ser Leu Gln Asp Val Gly Gly Asp Ala
          405          410          415
Asn Trp Gln Leu Val Val Glu Glu Gly Glu Met Lys Val Tyr Arg Arg
          420          425          430
Glu Val Glu Glu Asn Gly Ile Val Leu Asp Pro Leu Lys Ala Thr His
          435          440          445
Ala Val Lys Gly Val Thr Gly His Glu Val Cys Asn Tyr Phe Trp Asn
          450          455          460
Val Asp Val Arg Asn Asp Trp Glu Thr Thr Ile Glu Asn Phe His Val
465          470          475          480
Val Glu Thr Leu Ala Asp Asn Ala Ile Ile Ile Tyr Gln Thr His Lys
          485          490          495
Arg Val Trp Pro Ala Ser Gln Arg Asp Val Leu Tyr Leu Ser Val Ile
          500          505          510
Arg Lys Ile Pro Ala Leu Thr Glu Asn Asp Pro Glu Thr Trp Ile Val
          515          520          525
Cys Asn Phe Ser Val Asp His Asp Ser Ala Pro Leu Asn Asn Arg Cys
          530          535          540
Val Arg Ala Lys Ile Asn Val Ala Met Ile Cys Gln Thr Leu Val Ser
545          550          555          560
Pro Pro Glu Gly Asn Gln Glu Ile Ser Arg Asp Asn Ile Leu Cys Lys
          565          570          575
Ile Thr Tyr Val Ala Asn Val Asn Pro Gly Gly Trp Ala Pro Ala Ser
          580          585          590
Val Leu Arg Ala Val Ala Lys Arg Glu Tyr Pro Lys Phe Leu Lys Arg
          595          600          605
Phe Thr Ser Tyr Val Gln Glu Lys Thr Ala Gly Lys Pro Ile Leu Phe
610          615          620

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<210> 3367
<211> 366
<212> DNA
<213> Homo sapiens

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<400> 3367
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gagaattacg ccacagaggt gttggaggct ggcatcgtgg catctcagga gcacggaggg
120
tgccttcccc acttcaggcc tcttagtgtc aaggatgtga gaggcaaggg ctgctgggag
180
agtattttac ggactgaagg aggcgtgccg cctgccctgc cctcctactg gtggaggaag
240
gaggtgctgg gagccccaca actcagggcc ccccgacgcc cagtaaggcc actgtacacc
300
cctcctgacc cagaccataa ccagcctccg attgtgcttt tgaccctgtt tccttcaggc
360
accagg
366

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<210> 3368
<211> 104
<212> PRT

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<213> Homo sapiens

<400> 3368

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Met Thr Glu Asn Tyr Ala Thr Glu Val Leu Glu Ala Gly Ile Val Ala
 1           5           10           15
Ser Gln Glu His Gly Gly Cys Leu Pro His Phe Arg Pro Leu Ser Val
           20           25           30
Lys Asp Val Arg Gly Lys Gly Cys Trp Glu Ser Ile Leu Arg Thr Glu
           35           40           45
Gly Gly Val Pro Pro Ala Leu Pro Ser Tyr Trp Trp Arg Lys Glu Val
           50           55           60
Leu Gly Ala Pro Gln Leu Arg Ala Pro Arg Arg Pro Val Arg Pro Leu
65           70           75           80
Tyr Thr Pro Pro Asp Pro Asp His Asn Gln Pro Pro Ile Val Leu Leu
           85           90           95
Thr Leu Phe Pro Ser Gly Thr Arg
           100

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<210> 3369

<211> 1405

<212> DNA

<213> Homo sapiens

<400> 3369

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gataaggagc agaaaaatca ggaaaactgt ggtgcaaaga agaataaaaa gaagaggaaa
120
aaggttttat ataatgccaa taaaaatgat gattatgaca acgaggagat cttaacctat
180
gaggaaatgt cactttatca tcagccagca aataggaaga gacctatcat cttgattggt
240
ccacagaact gtggccagaa tgaattgctg cagaggctca tgaacaaaga aaaggaccgc
300
tttgcatctg cagttcctca tacaaccggg agtaggcgag accaagaagt agccggtaga
360
gattaccact ttgtttcgcg gcaagcattc gaggcagaca tagcagctgg aaagttcatt
420
gagcatggtg aatttgagaa gaatttgtat ggaactagca tagattctgt acggcaagtg
480
atcaactctg gcaaaatatg tcttttaagt cttcgtaac acgtcattgaa gactctccgg
540
aattcagatt tgaaaccata tattatcttc attgcacccc cttcacaaga aagacttcgg
600
gcattattgg ccaaagaagg caagaatcca aagcctgaag agttgagaga aatcattgag
660
aagacaagag agatggagca gaacaatggc cactactttg atacggcaat tgtgaattcc
720
gatcttgata aagcctatca ggaattgctt aggttaatta acaaacttga tactgaacct
780
cagtgggtac catccacttg gctgaggtga aagaacatc cattctgtgg catgttggac
840
ttgatctggc aaaaactgcc aataggagga ctgcccgaca ctgcagcaag attgaggata
900

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agatggaagg cagcagtata agctgtagat ctgttcttag atctcttgaa ttagtgagac
 960
 gacagttccc ttaggcagtt tgtgcatggc atcctttatt ctctatacat ggcttttagcg
 1020
 gttcttgcct ctttttggga ttctaaatgg aagctttcaa cagagcattc ctttttgtcc
 1080
 tgttaaaacc ttttgttttc acctaaaccc tttctgctta gttgtatctc tgtgaaaaac
 1140
 ttgtatacac aagcgtccat gtctcacaca aatattgatg tgattattct taagtgttaa
 1200
 atcattaaca cttaaatgac ttcatgggga atattgagca gagggactgt gcttctatgc
 1260
 actgggcaag gcagtatttg cttaggaaac taatttagtc atcagagata ctttcctaaa
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 1380
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 1405

<210> 3370

<211> 269

<212> PRT

<213> Homo sapiens

<400> 3370

Leu	Val	Pro	Gly	Lys	Ser	Phe	Gln	Gln	Gln	Arg	Glu	Ala	Met	Lys	Gln
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Thr	Ile	Glu	Glu	Asp	Lys	Glu	Gln	Lys	Asn	Gln	Glu	Asn	Cys	Gly	Ala
		20						25					30		
Lys	Lys	Asn	Lys	Lys	Lys	Arg	Lys	Lys	Val	Leu	Tyr	Asn	Ala	Asn	Lys
		35					40					45			
Asn	Asp	Asp	Tyr	Asp	Asn	Glu	Glu	Ile	Leu	Thr	Tyr	Glu	Glu	Met	Ser
		50				55					60				
Leu	Tyr	His	Gln	Pro	Ala	Asn	Arg	Lys	Arg	Pro	Ile	Ile	Leu	Ile	Gly
65					70				75						80
Pro	Gln	Asn	Cys	Gly	Gln	Asn	Glu	Leu	Arg	Gln	Arg	Leu	Met	Asn	Lys
			85					90						95	
Glu	Lys	Asp	Arg	Phe	Ala	Ser	Ala	Val	Pro	His	Thr	Thr	Arg	Ser	Arg
		100						105					110		
Arg	Asp	Gln	Glu	Val	Ala	Gly	Arg	Asp	Tyr	His	Phe	Val	Ser	Arg	Gln
		115				120					125				
Ala	Phe	Glu	Ala	Asp	Ile	Ala	Ala	Gly	Lys	Phe	Ile	Glu	His	Gly	Glu
		130				135					140				
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Ile	Asn	Ser	Gly	Lys	Ile	Cys	Leu	Leu	Ser	Leu	Arg	Thr	Gln	Ser	Leu
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Lys	Thr	Leu	Arg	Asn	Ser	Asp	Leu	Lys	Pro	Tyr	Ile	Ile	Phe	Ile	Ala
		180					185						190		
Pro	Pro	Ser	Gln	Glu	Arg	Leu	Arg	Ala	Leu	Leu	Ala	Lys	Glu	Gly	Lys
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Asn	Pro	Lys	Pro	Glu	Glu	Leu	Arg	Glu	Ile	Ile	Glu	Lys	Thr	Arg	Glu
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Met	Glu	Gln	Asn	Asn	Gly	His	Tyr	Phe	Asp	Thr	Ala	Ile	Val	Asn	Ser

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Asp	Leu	Asp	Lys	Ala	Tyr	Gln	Glu	Leu	Leu	Arg	Leu	Ile	Asn	Lys	Leu
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 <212> DNA
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<400> 3371
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<210> 3372
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 <212> PRT
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 35 40 45
 Asp Phe Pro Arg Ser Phe Leu Leu Asp Leu Pro Asn Phe Pro Asp Leu

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Ser Lys Ala Asp Ile Asn Gly Gln Asn Pro Asn Ile Gln Val Thr Ile		
65	70	75
Glu Val Val Asp Gly Pro Asp Ser Glu Ala Asp Lys Asp Gln His Pro		80
	85	90
Glu Asn Lys Pro Ser Trp Ser Val Pro Ser Pro Asp Trp Arg Ala Trp		95
	100	105
Trp Gln Arg Ser Leu Ser Leu Ala Arg Ala Asn Ser Gly Asp Gln Asp		110
	115	120
Tyr Lys Tyr Asp Ser Thr Ser Asp Asp Ser Asn Phe Leu Asn Pro Pro		125
	130	135
Arg Gly Trp Asp His Thr Ala Pro Gly His Arg Thr Phe Glu Thr Lys		140
145	150	155
Asp Gln Pro Glu Tyr Asp Ser Thr Asp Gly Glu Gly Asp Trp Ser Leu		160
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<211> 726

<212> DNA

<213> Homo sapiens

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atgcat

726

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<211> 84
 <212> PRT
 <213> Homo sapiens

<400> 3374
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 35 40 45
 Ser Ile Glu Asp Gly Pro Pro Phe Val Glu Pro Leu Leu Asn Phe Ile
 50 55 60
 Trp Phe Leu Leu Leu Ala Val Asp Gly Cys Val Leu Gly Ser Cys Arg
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<210> 3375
 <211> 393
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 <213> Homo sapiens

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<210> 3376
 <211> 103
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<400> 3376
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 Pro Gly Ser Ser Trp Pro Arg Leu Ala Leu Lys Ser Arg Pro Gly Cys
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<210> 3377

<211> 5235

<212> DNA

<213> Homo sapiens

<400> 3377

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<210> 3378

<211> 970

<212> PRT

<213> Homo sapiens

<400> 3378

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Cys	Leu	Phe	Leu	Ser	Arg	Thr	Phe	His	Glu	Glu	Glu	Gly	Ile	Asp	Glu
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Val Val Lys Lys Thr Glu	Ser Pro Ile Lys Leu	Ser Pro Ala Thr Pro
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Glu Asp Ser Ala Asp Leu	Lys Arg Ala Gln Lys	Asp Lys Gly Leu His
725	730	735
Val Glu Val Arg Val Asn	Arg Glu Trp Tyr Thr	Gly Arg Val Thr Ala
740	745	750
Val Glu Val Gly Lys His	Val Val Arg Trp Lys	Val Lys Phe Asp Tyr
755	760	765
Val Pro Thr Asp Thr Thr	Pro Arg Asp Arg Trp	Val Glu Lys Gly Ser
770	775	780
Glu Asp Val Arg Leu Met	Lys Pro Pro Ser Pro	Glu His Gln Ser Leu
785	790	795
Asp Thr Gln Gln Glu Gly	Gly Glu Glu Val Gly	Pro Val Ala Gln
805	810	815
Gln Ala Ile Ala Val Ala	Glu Pro Ser Thr Ser	Glu Cys Leu Arg Ile
820	825	830
Glu Pro Asp Thr Thr Ala	Leu Ser Thr Asn His	Glu Thr Ile Asp Leu
835	840	845
Leu Val Gln Ile Leu Arg	Asn Cys Leu Arg Tyr	Phe Leu Pro Pro Ser
850	855	860
Phe Pro Ile Ser Lys Lys	Gln Leu Ser Ala Met	Asn Ser Asp Glu Leu
865	870	875
Ile Ser Phe Pro Leu Lys	Glu Tyr Phe Lys Gln	Tyr Glu Val Gly Leu
885	890	895
Gln Asn Leu Cys Asn Ser	Tyr Gln Ser Arg Ala	Asp Ser Arg Ala Lys
900	905	910
Ala Ser Glu Glu Ser Leu	Arg Thr Ser Glu Arg	Lys Leu Arg Glu Thr
915	920	925
Glu Glu Lys Leu Gln Lys	Leu Arg Thr Asn Ile	Val Ala Leu Leu Gln
930	935	940
Lys Val Gln Glu Asp Ile	Asp Ile Asn Thr Asp	Asp Glu Leu Asp Ala
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Tyr Ile Glu Asp Leu Ile	Thr Lys Gly Asp	
965	970	

<210> 3379

<211> 898

<212> DNA

<213> Homo sapiens

<400> 3379

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 780
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<210> 3380

<211> 299

<212> PRT

<213> Homo sapiens

<400> 3380

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			20					25					30		
Thr	Asn	Gly	Asn	Arg	Pro	Thr	Ile	Pro	Gln	Pro	Trp	Glu	Leu	Arg	Val
		35					40					45			
Ser	Glu	Asp	Ala	Leu	Leu	Gly	Ser	Glu	Ile	Ala	Gln	Val	Thr	Gly	Asn
	50					55					60				
Asp	Val	Asp	Ser	Gly	Pro	Val	Leu	Trp	Tyr	Val	Leu	Ser	Pro	Ser	Gly
65				70					75					80	
Pro	Gln	Asp	Pro	Phe	Ser	Val	Gly	Arg	Tyr	Gly	Gly	Arg	Val	Ser	Leu
			85					90					95		
Thr	Gly	Pro	Leu	Asp	Phe	Glu	Gln	Cys	Asp	Arg	Tyr	Gln	Leu	Gln	Leu
		100						105				110			
Leu	Ala	His	Asp	Gly	Pro	His	Glu	Gly	Arg	Ala	Xaa	Leu	Thr	Val	Leu
		115					120					125			
Val	Glu	Asp	Val	Asn	Asp	Asn	Ala	Pro	Ala	Phe	Ser	Gln	Ser	Leu	Tyr

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      130              135              140
Gln Val Met Leu Leu Glu His Thr Pro Pro Gly Ser Ala Ile Leu Ser
145              150              155              160
Val Ser Ala Thr Asp Arg Asp Ser Gly Ala Asn Gly His Ile Ser Tyr
      165              170              175
His Leu Ala Ser Pro Ala Asp Gly Phe Ser Val Asp Pro Asn Asn Gly
      180              185              190
Thr Leu Phe Thr Ile Val Gly Thr Leu Ala Leu Gly His Asp Gly Ser
      195              200              205
Gly Ala Val Asp Val Val Leu Glu Ala Arg Asp His Gly Ala Pro Val
      210              215              220
Arg Ala Ala Arg Ala Thr Val Asn Val Gln Leu Arg Asp Gln Asn Asp
225              230              235              240
His Ala Pro Ser Phe Thr Leu Phe His Tyr Arg Val Ala Val Thr Glu
      245              250              255
Asp Leu Pro Pro Gly Ser Thr Leu Leu Thr Leu Glu Ala Thr Asp Ala
      260              265              270
Asp Gly Ser Arg Ser His Ala Ala Val Asp Tyr Ser Ile Ile Ser Gly
      275              280              285
Asn Trp Gly Arg Val Phe Gln Leu Glu Pro Arg
      290              295

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<210> 3381

<211> 1379

<212> DNA

<213> Homo sapiens

<400> 3381

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180
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240
cgcgtcttct ttcaggctga ggaccgggtc gtgagacgca agaagaaggc agcagcagct
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360
gacaagcgca tagccaagcg cgtggcggcc agtctacaca acacgcctat gggtgccgcg
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480
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720
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780

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 1260
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 1379

<210> 3382

<211> 279

<212> PRT

<213> Homo sapiens

<400> 3382

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Ala	Thr	Glu	Gln	Glu	Pro	Leu	Glu	Gly	Thr	Glu	Gln	Thr	Leu	Asp	Ala
			20					25					30		
Glu	Glu	Glu	Gln	Glu	Glu	Ser	Glu	Glu	Ala	Ala	Cys	Gly	Ser	Lys	Lys
		35				40					45				
Arg	Val	Val	Pro	Gly	Ile	Val	Tyr	Leu	Gly	His	Ile	Pro	Pro	Arg	Phe
	50				55					60					
Arg	Pro	Leu	His	Val	Arg	Asn	Leu	Leu	Ser	Ala	Tyr	Gly	Glu	Val	Gly
65				70					75					80	
Arg	Val	Phe	Phe	Gln	Ala	Glu	Asp	Arg	Phe	Val	Arg	Arg	Lys	Lys	Lys
			85					90					95		
Ala	Ala	Ala	Ala	Ala	Gly	Gly	Lys	Lys	Arg	Ser	Tyr	Thr	Lys	Asp	Tyr
		100					105						110		
Thr	Glu	Gly	Trp	Val	Glu	Phe	Arg	Asp	Lys	Arg	Ile	Ala	Lys	Arg	Val
	115					120					125				
Ala	Ala	Ser	Leu	His	Asn	Thr	Pro	Met	Gly	Ala	Arg	Arg	Arg	Ser	Pro
	130				135					140					
Phe	Arg	Tyr	Asp	Leu	Trp	Asn	Leu	Lys	Tyr	Leu	His	Arg	Phe	Thr	Trp
145				150					155					160	
Ser	His	Leu	Ser	Glu	His	Leu	Ala	Phe	Glu	Arg	Gln	Val	Arg	Arg	Gln
			165					170					175		
Arg	Leu	Arg	Ala	Glu	Val	Ala	Gln	Ala	Lys	Arg	Glu	Thr	Asp	Phe	Tyr
	180						185					190			
Leu	Gln	Ser	Val	Glu	Arg	Gly	Gln	Arg	Phe	Leu	Ala	Ala	Asp	Gly	Asp
	195					200					205				
Pro	Ala	Arg	Pro	Asp	Gly	Ser	Trp	Thr	Phe	Ala	Gln	Arg	Pro	Thr	Glu

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      210              215              220
Gln Glu Leu Arg Ala Arg Lys Ala Ala Arg Pro Gly Gly Arg Glu Arg
225              230              235              240
Ala Arg Leu Ala Thr Ala Gln Asp Lys Ala Arg Ser Asn Lys Gly Leu
      245              250              255
Leu Ala Arg Ile Phe Gly Ala Pro Pro Pro Ser Glu Ser Met Glu Gly
      260              265              270
Pro Ser Leu Val Arg Asp Ser
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<210> 3383
 <211> 309
 <212> DNA
 <213> Homo sapiens

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<400> 3383
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120
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180
ctgggagctg tcttgcccc gatctccac acaaacactc cagcatgaaa gagcgagact
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300
agaaagccc
309

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<210> 3384
 <211> 94
 <212> PRT
 <213> Homo sapiens

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<400> 3384
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Thr Asn Phe Val Ala Gly Val Ser Ile Val Val Ile Cys Val Ile Gly
      20      25      30
Asn Ala His Phe Leu Thr Ser Phe Val Leu Glu His Arg Ile Thr Ala
      35      40      45
Asn Ala His Pro Trp Glu Leu Ser Cys Pro Arg Ser Pro Thr Gln Thr
      50      55      60
Leu Gln His Glu Arg Ala Arg Leu Asn Leu Lys Lys Lys Lys Phe Arg
65      70      75      80
Ala Pro Glu Gln Glu Leu Val Ser Ile Ile Asn Ser Glu Ser
      85      90

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<210> 3385
 <211> 720
 <212> DNA
 <213> Homo sapiens

<400> 3385

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 120
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 180
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 240
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 300
 cacatggagg atccccctga gatggagcgg agcccccagc tgcggaagca cgctgccga
 360
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 420
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 480
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 540
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 600
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<210> 3386

<211> 188

<212> PRT

<213> Homo sapiens

<400> 3386

Met	Val	Val	Lys	Thr	Val	Thr	Val	Arg	Gly	Trp	Gly	Ala	Leu	Arg	Ser
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Thr	Ser	Ser	Ala	Pro	His	Tyr	Pro	Gly	Ser	Phe	Arg	Val	Gly	Pro	Arg
			20					25					30		
Gln	Pro	Pro	Ala	Ser	Ala	Thr	Thr	Pro	Val	Pro	Leu	Ala	Arg	Phe	Phe
			35				40					45			
Val	Asn	Phe	Pro	Ser	Ala	Lys	Gln	Tyr	Phe	Ser	Gln	Phe	Lys	His	Met
	50					55					60				
Glu	Asp	Pro	Leu	Glu	Met	Glu	Arg	Ser	Pro	Gln	Leu	Arg	Lys	His	Ala
65					70					75				80	
Cys	Arg	Val	Met	Gly	Ala	Leu	Asn	Thr	Val	Val	Glu	Asn	Leu	His	Asp
				85				90					95		
Pro	Asp	Lys	Val	Ser	Ser	Val	Leu	Ala	Leu	Val	Gly	Lys	Ala	His	Ala
			100					105					110		
Leu	Lys	His	Lys	Val	Glu	Pro	Val	Tyr	Phe	Lys	Ile	Leu	Ser	Gly	Val
		115				120						125			
Ile	Leu	Glu	Val	Val	Ala	Glu	Glu	Phe	Ala	Ser	Asp	Phe	Pro	Pro	Glu
	130					135					140				
Thr	Gln	Arg	Ala	Trp	Ala	Lys	Leu	Arg	Gly	Leu	Ile	Tyr	Ser	His	Val
145					150					155				160	
Thr	Ala	Ala	Tyr	Lys	Glu	Val	Gly	Trp	Val	Gln	Gln	Val	Pro	Asn	Ala
			165					170					175		
Thr	Thr	Pro	Pro	Ala	Thr	Leu	Pro	Ser	Ser	Gly	Pro				

180

185

<210> 3387

<211> 3299

<212> DNA

<213> Homo sapiens

<400> 3387

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 360
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<210> 3388

<211> 153

<212> PRT

<213> Homo sapiens

<400> 3388

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Leu	Gly	Val	Trp	Thr	Gln	Arg	Arg	Arg	Glu	His	Glu	Arg	Pro	Ser	Ser
			20					25					30		
Leu	Arg	Val	Val	Leu	Ala	Leu	Arg	Gly	Arg	Glu	Glu	Val	Ser	Asp	Ala
		35					40					45			
Gly	Cys	Gly	Gly	Pro	Arg	Ile	Thr	Ile	Asn	Lys	Asp	Thr	Lys	Val	Pro
	50					55					60				
Asn	Ala	Cys	Leu	Phe	Thr	Ile	Asn	Lys	Glu	Asp	His	Thr	Leu	Gly	Asn
65					70					75				80	
Ile	Ile	Lys	Ser	Gln	Leu	Leu	Lys	Asp	Pro	Gln	Val	Leu	Phe	Ala	Gly
				85				90						95	
Tyr	Lys	Val	Pro	His	Pro	Leu	Glu	His	Lys	Ile	Ile	Ile	Arg	Val	Gln
			100					105					110		
Thr	Thr	Pro	Asp	Tyr	Ser	Pro	Gln	Glu	Ala	Phe	Thr	Asn	Ala	Ile	Thr
		115					120					125			
Asp	Leu	Ile	Ser	Glu	Leu	Ser	Leu	Leu	Glu	Glu	Arg	Phe	Arg	Val	Ala
	130					135					140				
Ile	Lys	Asp	Lys	Gln	Glu	Gly	Ile	Glu							
145						150									

<210> 3389

<211> 308

<212> DNA

<213> Homo sapiens

<400> 3389

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cggtcgac
308

<210> 3390
<211> 102
<212> PRT
<213> Homo sapiens

<400> 3390
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<210> 3391
<211> 1295
<212> DNA
<213> Homo sapiens

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<211> 355

<212> PRT

<213> Homo sapiens

<400> 3392

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Asp	Ala	Tyr	Asp	Leu	Ser	Val	Leu	Gly	Val	Asp	Gln	Ser	Ser	Pro	Lys
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	245	250
Ile Tyr Pro Asp Ala Ser Asp Asn Val Cys Leu Ala Trp Asn Tyr Arg		255
	260	265
Asp Ala Leu Ala Val Ile Trp Ser His Glu Cys Val Val Cys Phe Phe		270
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Ala Gly His Thr His Asp Gly Gly Tyr Ser Glu Asp Pro Phe Gly Val		285
	290	295
Tyr His Val Asn Leu Glu Gly Val Ile Glu Thr Ala Pro Asp Ser Gln		300
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Ala Phe Gly Thr Val His Val Tyr Pro Asp Lys Met Met Leu Lys Gly		320
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 <212> DNA
 <213> Homo sapiens

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 <212> PRT
 <213> Homo sapiens

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Thr	Gly	Ser	Ser	Ser	Leu	Trp	Asn	Leu	Met	Gly	Asn	Xaa	Met	Val	Met
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Thr	Gln	Tyr	Ile	Arg	Leu	Thr	Pro	Asp	Met	Gln	Ser	Lys	Gln	Gly	Ala
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Gly	Asn	Met	Asp	Lys	Phe	Val	Gly	Leu	Gly	Val	Phe	Val	Asp	Thr	Tyr
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<212> DNA

<213> Homo sapiens

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 50 55 60
 Ala Trp Tyr Ser Glu Ser Glu Ile Thr Gln Gly Ala Arg Ser Arg Ser
 65 70 75 80
 Gln Asn Gln Gln Arg Asp His Asp Ser Lys Arg Pro Lys Leu Ser Cys
 85 90 95
 Thr Asn Cys Thr Thr Ser Ala Gly Arg Asn Val Gly Asn Gly Leu Asn
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 Thr Leu Ser Asp Ser Ser Trp Arg His Ser Gln Val Pro Arg Ser Ser
 115 120 125
 Ser Met Val Leu Gly Ser Phe Gly Thr Asp Leu Met Arg Glu Arg Arg
 130 135 140
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 145 150 155 160
 Ser His Arg Ser Gly Asp Phe Thr Thr Ser Ser Tyr Val Gln Asp Arg
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 Glu Val Met Gly Asp Ala Val Leu Glu Ala Ser His Asn Val Gln Gly
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 Cys Gly Cys Ser Trp Val Ser His Ser Gly Arg Gly Val Gly Pro Glu
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 Ala Glu Gly Ala Gly Ser Pro Gln Ser Leu Gly His Gly Ser Gly Gly
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 Trp Ala Ala Arg Arg Cys His Cys Leu Ser Val Ala Gly Val Ala Ala
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 <212> DNA
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<211> 1069

<212> PRT

<213> Homo sapiens

<400> 3400

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1				5					10					15	
Ile	Ser	Leu	Leu	Ser	Ala	Leu	Asn	Glu	Glu	Arg	Leu	Lys	Gly	Gln	Leu
			20					25					30		
Cys	Asp	Val	Leu	Leu	Ile	Val	Gly	Asp	Gln	Lys	Phe	Arg	Ala	His	Lys
		35					40					45			
Asn	Val	Leu	Ala	Ala	Ser	Ser	Glu	Tyr	Phe	Gln	Ser	Leu	Phe	Thr	Asn
		50				55					60				
Lys	Glu	Asn	Glu	Ser	Gln	Thr	Val	Phe	Gln	Leu	Asp	Phe	Cys	Glu	Pro
65					70					75				80	
Asp	Ala	Phe	Asp	Asn	Val	Leu	Asn	Tyr	Ile	Tyr	Ser	Ser	Ser	Leu	Phe
				85					90					95	
Val	Glu	Lys	Ser	Ser	Leu	Ala	Ala	Val	Gln	Glu	Leu	Gly	Tyr	Ser	Leu
			100					105					110		
Gly	Ile	Ser	Phe	Leu	Thr	Asn	Ile	Val	Ser	Lys	Thr	Pro	Gln	Ala	Pro
		115					120					125			
Phe	Pro	Thr	Cys	Pro	Asn	Arg	Lys	Lys	Val	Phe	Val	Glu	Asp	Asp	Glu
		130				135					140				
Asn	Ser	Ser	Gln	Lys	Arg	Ser	Val	Ile	Val	Cys	Gln	Ser	Arg	Asn	Glu
145				150						155				160	
Ala	Gln	Gly	Lys	Thr	Val	Ser	Gln	Asn	Gln	Pro	Asp	Val	Ser	His	Thr
			165					170						175	
Ser	Arg	Pro	Ser	Pro	Ser	Ile	Ala	Val	Lys	Ala	Asn	Thr	Asn	Lys	Pro
			180					185					190		
His	Val	Pro	Lys	Pro	Ile	Glu	Pro	Leu	His	Asn	Leu	Ser	Leu	Thr	Glu
		195					200					205			
Lys	Ser	Trp	Pro	Lys	Asp	Ser	Ser	Val	Val	Tyr	Ala	Lys	Ser	Leu	Glu
		210				215					220				
His	Ser	Gly	Ser	Leu	Asp	Asp	Pro	Asn	Arg	Ile	Ser	Leu	Val	Lys	Arg

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225          230          235          240
Asn Ala Val Leu Pro Ser Lys Pro Leu Gln Asp Arg Glu Ala Met Asp
          245          250          255
Asp Lys Pro Gly Val Ser Gly Gln Leu Pro Lys Gly Lys Ala Leu Glu
          260          265          270
Leu Ala Leu Lys Arg Pro Arg Pro Pro Val Leu Ser Val Cys Ser Ser
          275          280          285
Ser Glu Thr Pro Tyr Leu Leu Lys Glu Thr Asn Lys Gly Asn Gly Gln
          290          295          300
Gly Glu Asp Arg Asn Leu Leu Tyr Tyr Ser Lys Leu Gly Leu Val Ile
305          310          315          320
Pro Ser Ser Gly Ser Gly Ser Gly Asn Gln Ser Ile Asp Arg Ser Gly
          325          330          335
Pro Leu Val Lys Ser Leu Leu Arg Arg Ser Leu Ser Met Asp Ser Gln
          340          345          350
Val Pro Val Tyr Ser Pro Ser Ile Asp Leu Lys Ser Ser Gln Gly Ser
          355          360          365
Ser Ser Val Ser Ser Asp Ala Pro Gly Asn Val Leu Cys Ala Leu Ser
          370          375          380
Gln Lys Ser Ser Leu Lys Asp Cys Ser Glu Lys Thr Ala Leu Asp Asp
385          390          395          400
Arg Pro Gln Val Leu Gln Pro His Arg Leu Arg Ser Phe Ser Ala Ser
          405          410          415
Gln Ser Thr Asp Arg Glu Gly Ala Ser Pro Val Thr Glu Val Arg Ile
          420          425          430
Lys Thr Glu Pro Ser Ser Pro Leu Ser Asp Pro Ser Asp Ile Ile Arg
          435          440          445
Val Thr Val Gly Asp Ala Ala Thr Thr Ala Ala Ala Ser Ser Ser Ser
          450          455          460
Val Thr Arg Asp Leu Ser Leu Lys Thr Glu Asp Asp Gln Lys Asp Met
465          470          475          480
Ser Arg Leu Pro Ala Lys Arg Arg Phe Gln Ala Asp Arg Arg Leu Pro
          485          490          495
Phe Lys Lys Leu Lys Val Asn Glu His Gly Ser Pro Val Ser Glu Asp
          500          505          510
Asn Phe Glu Glu Gly Ser Ser Pro Thr Leu Leu Asp Ala Asp Phe Pro
          515          520          525
Asp Ser Asp Leu Asn Lys Asp Glu Phe Gly Glu Leu Glu Gly Thr Arg
          530          535          540
Pro Asn Lys Lys Phe Lys Cys Lys His Cys Leu Lys Ile Phe Arg Ser
545          550          555          560
Thr Ala Gly Leu His Arg His Val Asn Met Tyr His Asn Pro Glu Lys
          565          570          575
Pro Tyr Ala Cys Asp Ile Cys His Lys Arg Phe His Thr Asn Phe Lys
          580          585          590
Val Trp Thr His Cys Gln Thr Gln His Gly Ile Val Lys Asn Pro Ser
          595          600          605
Pro Ala Ser Ser Ser His Ala Val Leu Asp Glu Lys Phe Gln Arg Lys
          610          615          620
Leu Ile Asp Ile Val Arg Glu Arg Glu Ile Lys Lys Ala Leu Ile Ile
625          630          635          640
Lys Leu Arg Arg Gly Lys Pro Gly Phe Gln Gly Gln Ser Ser Ser Gln
          645          650          655
Ala Gln Gln Val Ile Lys Arg Asn Leu Arg Ser Arg Ala Lys Gly Ala

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			660					665					670				
Tyr	Ile	Cys	Thr	Tyr	Cys	Gly	Lys	Ala	Tyr	Arg	Phe	Leu	Ser	Gln	Phe		
		675					680					685					
Lys	Gln	His	Ile	Lys	Met	His	Pro	Gly	Glu	Lys	Pro	Leu	Gly	Val	Asn		
	690					695					700						
Lys	Val	Ala	Lys	Pro	Lys	Glu	His	Ala	Pro	Leu	Ala	Ser	Pro	Val	Glu		
705					710					715					720		
Asn	Lys	Glu	Val	Tyr	Gln	Cys	Arg	Leu	Cys	Asn	Ala	Lys	Leu	Ser	Ser		
			725					730					735				
Leu	Leu	Glu	Gln	Gly	Ser	His	Glu	Arg	Leu	Cys	Arg	Asn	Ala	Ala	Val		
		740					745					750					
Cys	Pro	Tyr	Cys	Ser	Leu	Arg	Phe	Phe	Ser	Pro	Glu	Leu	Lys	Gln	Glu		
	755					760					765						
His	Glu	Ser	Lys	Cys	Glu	Tyr	Lys	Lys	Leu	Thr	Cys	Leu	Glu	Cys	Met		
	770					775					780						
Arg	Thr	Phe	Lys	Ser	Ser	Phe	Ser	Ile	Trp	Arg	His	Gln	Val	Glu	Val		
785					790					795					800		
His	Asn	Gln	Asn	Asn	Met	Ala	Pro	Thr	Glu	Asn	Phe	Ser	Leu	Pro	Val		
			805					810					815				
Leu	Asp	His	Asn	Gly	Asp	Val	Thr	Gly	Ser	Ser	Arg	Pro	Gln	Ser	Gln		
		820						825				830					
Pro	Glu	Pro	Asn	Lys	Val	Asn	His	Ile	Val	Thr	Thr	Lys	Asp	Asp	Asn		
	835					840					845						
Val	Phe	Ser	Asp	Ser	Ser	Glu	Gln	Val	Asn	Phe	Asp	Ser	Glu	Asp	Ser		
	850					855				860							
Ser	Cys	Leu	Pro	Glu	Asp	Leu	Ser	Leu	Ser	Lys	Gln	Leu	Lys	Ile	Gln		
865					870					875					880		
Val	Lys	Glu	Glu	Pro	Val	Glu	Glu	Ala	Glu	Glu	Glu	Ala	Pro	Glu	Ala		
			885					890					895				
Ser	Thr	Ala	Pro	Lys	Glu	Ala	Gly	Pro	Ser	Lys	Glu	Ala	Ser	Leu	Trp		
		900						905				910					
Pro	Cys	Glu	Lys	Cys	Gly	Lys	Met	Phe	Thr	Val	His	Lys	Gln	Leu	Glu		
	915					920					925						
Arg	His	Gln	Glu	Leu	Leu	Cys	Ser	Val	Lys	Pro	Phe	Ile	Cys	His	Val		
	930					935				940							
Cys	Asn	Lys	Ala	Phe	Arg	Thr	Asn	Phe	Arg	Leu	Trp	Ser	His	Phe	Gln		
945					950					955					960		
Ser	His	Met	Ser	Gln	Ala	Ser	Glu	Glu	Ser	Ala	His	Lys	Glu	Ser	Glu		
			965					970					975				
Val	Cys	Pro	Val	Pro	Thr	Asn	Ser	Pro	Ser	Pro	Pro	Pro	Leu	Pro	Pro		
		980						985				990					
Pro	Pro	Pro	Leu	Pro	Lys	Ile	Gln	Pro	Leu	Glu	Pro	Asp	Ser	Pro	Thr		
	995						1000					1005					
Gly	Leu	Ser	Glu	Asn	Pro	Thr	Pro	Ala	Thr	Glu	Lys	Leu	Phe	Val	Pro		
	1010					1015					1020						
Gln	Glu	Ser	Asp	Thr	Leu	Phe	Tyr	His	Ala	Pro	Pro	Leu	Ser	Ala	Ile		
1025					1030					1035					1040		
Thr	Phe	Lys	Arg	Gln	Phe	Met	Cys	Lys	Leu	Cys	His	Arg	Thr	Phe	Lys		
			1045					1050					1055				
Thr	Ala	Phe	Ser	Leu	Trp	Ser	His	Glu	Gln	Thr	His	Asn					
		1060						1065									

<210> 3401

<211> 579

<212> DNA

<213> Homo sapiens

<400> 3401

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 tctcacttcc aaaagttatt tgatgtgcct tctttaaagtg gagtctatcc ccgaatgaat
 120
 gaagtttata ctaggcttgg agaaatgaac aatgctgtga gaaacctcca agaactctta
 180
 gaattagata gttcatcctc attgtgtgtg ctagtaagca ctggttgaaa actctgtagg
 240
 ctgattaatg aagatgtgaa tgagcagggt atgcagggtat taggacctga agacctccag
 300
 agcattatct acaaattgga agaacacgag gaatttttcc cagcatttca ggcatttact
 360
 aatgatctac ttgaaatctt agaaattgat gactctggat gccattgtac ctgcagtaaa
 420
 gaaattaaaa gtactttcat actgaaaaca aatcaaataca tttttactgt gtaaattgta
 480
 ttcttaacat tttgtatttt gtaggattga tcttattttg agacaagggt tgtaaaatgt
 540
 atttgctctc agaattcatc ccttcttagg tattagggtc
 579

<210> 3402

<211> 148

<212> PRT

<213> Homo sapiens

<400> 3402

Met	Pro	His	Phe	Gln	Thr	Leu	Gln	Ala	Ile	Val	Ser	His	Phe	Gln	Lys
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Leu	Phe	Asp	Val	Pro	Ser	Leu	Asn	Gly	Val	Tyr	Pro	Arg	Met	Asn	Glu
			20					25					30		
Val	Tyr	Thr	Arg	Leu	Gly	Glu	Met	Asn	Asn	Ala	Val	Arg	Asn	Leu	Gln
		35				40					45				
Glu	Leu	Leu	Glu	Leu	Asp	Ser	Ser	Ser	Ser	Leu	Cys	Val	Leu	Val	Ser
	50				55					60					
Thr	Val	Gly	Lys	Leu	Cys	Arg	Leu	Ile	Asn	Glu	Asp	Val	Asn	Glu	Gln
65				70					75					80	
Val	Met	Gln	Val	Leu	Gly	Pro	Glu	Asp	Leu	Gln	Ser	Ile	Ile	Tyr	Lys
			85				90						95		
Leu	Glu	Glu	His	Glu	Glu	Phe	Phe	Pro	Ala	Phe	Gln	Ala	Phe	Thr	Asn
			100				105						110		
Asp	Leu	Leu	Glu	Ile	Leu	Glu	Ile	Asp	Asp	Ser	Gly	Cys	His	Cys	Thr
		115				120					125				
Cys	Ser	Lys	Glu	Ile	Lys	Ser	Thr	Phe	Ile	Leu	Lys	Thr	Asn	Gln	Ile
	130					135					140				
Ile	Phe	Thr	Val												
145															

<210> 3403

<211> 1696

<212> DNA

<213> Homo sapiens

<400> 3403

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120
accatggccc gaaatgcaga aaaggccatg acggccttag caagatttcg ccaggctcag
180
ctggaagagg gaaaagtga ggaacgaaga ccctttctgg cctcagaatg tactgaactg
240
cctaaagctg agaagtggag acgacagatc attggagaga tctctaaaaa agtggctcag
300
attcagaatg ctggtttagg tgaatttcga attcgtgacc tgaatgatga aattaacaag
360
ctgctaaggg agaaaggaca ctgggaggtc cggataaagg agctgggagg tcttgattat
420
ggaaaagttg gccctaaaat gctggatcat gaaggaaaag aagtcccagg aaaccgaggt
480
tacaagtact ttggagcagc aaaagatttg cctggtgtta gagagctgtt tgaaaaanga
540
acctcttcct cctcccagnn aaagacacgt gctgagctca tgaaggcaat cgatttttag
600
tactatggtt acctagatga agatgatggt gttattgtgc ctttggaaca ggaatatgaa
660
aagaaactca gagccgagtt agtggaaaag tggaaagcag agagagaggc tcggctggca
720
agaggagaaa aggaagagga ggaggaagag gaggaagaga tcaacatcta tgcagtcacc
780
gaggaggagt cggacgagga aggcagccag gagaaaggag gggacgacag ccagcagaag
840
ttcattgctc acgtccctgt tccctcgcag caagagattg aggaggcact ggtgcgaagg
900
aagaaaatgg aactcctcca gaagtatgca agcgagacc cgcaggccca aagtgaagaa
960
gccagaaggc tcttggggta ttaggaccca gctggggctc tccttgaggt tcttccatcc
1020
cccagtggta cctcaggacc cagggtgca gacacaggct ggtgctgcaa gggctcctgc
1080
cccattctca gccttccttc cctctccttg tctcatgttg accggagggt aggggtctgt
1140
cctggtctt cctggtaggt tttgtacaca tattttgcta ctgtgtggat ccatttattt
1200
ttattgtgga gtgtatacaa caggttgcga actggctgcc tgtgtcttat tttgacttgc
1260
actgccattt tgaggggaga agaatcaatt agtggcaaac atttaaaaat gcaatttttt
1320
gcagaccaa gtataatttt aaaaaatgca aattttctaa aagacacatc tcttgaaaaa
1380
tgagatgatg tggccaggcg cagtggctca cgctgtaac ccagcactt tgggaggccg
1440
aggcgggagg gtcacgaggt caagagatgg agaccatcct ggccaacatg gtgaaacccc
1500

atgtctacta aaaatacaaa aaaattagct gggcgtactg gcatgcacct gtagtcccag
 1560
 ctgctttggg aggctgaggc aggagaatca cttgaacccc cggaggtgga ggtttgagtg
 1620
 agcccagatc gtggccattg actccaagcc ttgggacaag tgggaacctc ttccccccaa
 1680
 aaaaaaaaaa aagttt
 1696

<210> 3404
 <211> 286
 <212> PRT
 <213> Homo sapiens

<400> 3404
 Met Ala Arg Asn Ala Glu Lys Ala Met Thr Ala Leu Ala Arg Phe Arg
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 Gln Ala Gln Leu Glu Glu Gly Lys Val Lys Glu Arg Arg Pro Phe Leu
 20 25 30
 Ala Ser Glu Cys Thr Glu Leu Pro Lys Ala Glu Lys Trp Arg Arg Gln
 35 40 45
 Ile Ile Gly Glu Ile Ser Lys Lys Val Ala Gln Ile Gln Asn Ala Gly
 50 55 60
 Leu Gly Glu Phe Arg Ile Arg Asp Leu Asn Asp Glu Ile Asn Lys Leu
 65 70 75 80
 Leu Arg Glu Lys Gly His Trp Glu Val Arg Ile Lys Glu Leu Gly Gly
 85 90 95
 Pro Asp Tyr Gly Lys Val Gly Pro Lys Met Leu Asp His Glu Gly Lys
 100 105 110
 Glu Val Pro Gly Asn Arg Gly Tyr Lys Tyr Phe Gly Ala Ala Lys Asp
 115 120 125
 Leu Pro Gly Val Arg Glu Leu Phe Glu Lys Xaa Thr Ser Ser Ser Ser
 130 135 140
 Gln Xaa Lys Thr Arg Ala Glu Leu Met Lys Ala Ile Asp Phe Glu Tyr
 145 150 155 160
 Tyr Gly Tyr Leu Asp Glu Asp Asp Gly Val Ile Val Pro Leu Glu Gln
 165 170 175
 Glu Tyr Glu Lys Lys Leu Arg Ala Glu Leu Val Glu Lys Trp Lys Ala
 180 185 190
 Glu Arg Glu Ala Arg Leu Ala Arg Gly Glu Lys Glu Glu Glu Glu Glu
 195 200 205
 Glu Glu Glu Glu Ile Asn Ile Tyr Ala Val Thr Glu Glu Glu Ser Asp
 210 215 220
 Glu Glu Gly Ser Gln Glu Lys Gly Gly Asp Asp Ser Gln Gln Lys Phe
 225 230 235 240
 Ile Ala His Val Pro Val Pro Ser Gln Gln Glu Ile Glu Glu Ala Leu
 245 250 255
 Val Arg Arg Lys Lys Met Glu Leu Leu Gln Lys Tyr Ala Ser Glu Thr
 260 265 270
 Leu Gln Ala Gln Ser Glu Glu Ala Arg Arg Leu Leu Gly Tyr
 275 280 285

<210> 3405
 <211> 402

<212> DNA

<213> Homo sapiens

<400> 3405

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gggtgggagg ccccttgca ggagaggctg gcgttctatc agacagcaat tgaaagcgcc
60
agacaagctg gagacagcgc caagatgcgg cgctacgatc gggggcttaa aactctggaa
120
aacctgctcg cctccatccg taagggaat gccattgacg aagcggacat cccgccgcca
180
gtggccatag gaaaaggccc ggcgtccacg cctacctaca gccctgcacc caccagccg
240
gccctagaa tcgcgtcagc ccagagccc agggtcaccc tggagggacc ttctgccacc
300
gccccagcct catctccagg cttggctaag cccagatgc cccaggtcc ctgcagccct
360
ccctctggcc cagttgcaga gccgccagcg cgactacaag ct
402

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<210> 3406

<211> 134

<212> PRT

<213> Homo sapiens

<400> 3406

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Gly Trp Glu Ala Pro Leu Gln Glu Arg Leu Ala Phe Tyr Gln Thr Ala
1           5           10           15
Ile Glu Ser Ala Arg Gln Ala Gly Asp Ser Ala Lys Met Arg Arg Tyr
20          25          30
Asp Arg Gly Leu Lys Thr Leu Glu Asn Leu Leu Ala Ser Ile Arg Lys
35          40          45
Gly Asn Ala Ile Asp Glu Ala Asp Ile Pro Pro Pro Val Ala Ile Gly
50          55          60
Lys Gly Pro Ala Ser Thr Pro Thr Tyr Ser Pro Ala Pro Thr Gln Pro
65          70          75          80
Ala Pro Arg Ile Ala Ser Ala Pro Glu Pro Arg Val Thr Leu Glu Gly
85          90          95
Pro Ser Ala Thr Ala Pro Ala Ser Ser Pro Gly Leu Ala Lys Pro Gln
100         105         110
Met Pro Pro Gly Pro Cys Ser Pro Pro Ser Gly Pro Val Ala Glu Pro
115         120         125
Pro Ala Arg Leu Gln Ala
130

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<210> 3407

<211> 535

<212> DNA

<213> Homo sapiens

<400> 3407

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ggaatgaggg gggatgggga agaaccccc aggacagcac caagcaggtc tgcggggacc
60
tttcccgac accatgcctt ctggcggtg aggcaggtgg cggcaccgac aggccgggg
120

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gggacctttc ccggacaccc aacctcctcg gtggcgaggc aggtggcggc accgacaggc
 180
 ccggcgggga cctttcccg ancacctggc ctccttggca agcaggtggc ggcaccaaca
 240
 ggcccggggg ggacctttcc cggacacctg gcctcctcgg cgaggcaggt ggcagaactg
 300
 gttccacgtc tgatcttctt tagacaaacc tgccttcaga ggaaattgtg ttcaactgga
 360
 gaaactggaa aatgtactag atattggctg atatgaagga tatatgtttt aagtatgata
 420
 attcgatttt ggctctgtag ggaaaggctc ttattttaaa aagatgtgca ctagagaaaa
 480
 aggaaacagc atgtagcaaa tacatccacg gatgtcctcc tggtttaaaa aaaaa
 535

<210> 3408

<211> 131

<212> PRT

<213> Homo sapiens

<400> 3408

Gly	Met	Arg	Gly	Asp	Gly	Glu	Glu	Pro	Pro	Arg	Thr	Ala	Pro	Ser	Arg
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Ser	Ala	Gly	Thr	Phe	Pro	Gly	His	His	Ala	Phe	Ser	Ala	Val	Arg	Gln
			20				25						30		
Val	Ala	Ala	Pro	Thr	Gly	Pro	Gly	Gly	Thr	Phe	Pro	Gly	His	Pro	Thr
		35				40						45			
Ser	Ser	Val	Ala	Arg	Gln	Val	Ala	Ala	Pro	Thr	Gly	Pro	Ala	Gly	Thr
	50				55						60				
Phe	Pro	Gly	Xaa	Pro	Gly	Leu	Leu	Gly	Lys	Gln	Val	Ala	Ala	Pro	Thr
65					70				75					80	
Gly	Pro	Gly	Gly	Thr	Phe	Pro	Gly	His	Leu	Ala	Ser	Ser	Ala	Arg	Gln
				85				90						95	
Val	Ala	Glu	Leu	Val	Pro	Arg	Leu	Ile	Phe	Leu	Arg	Gln	Thr	Cys	Leu
			100				105						110		
Gln	Arg	Lys	Leu	Cys	Ser	Thr	Gly	Glu	Thr	Gly	Lys	Cys	Thr	Arg	Tyr
		115					120					125			
Trp	Leu	Ile													
			130												

<210> 3409

<211> 959

<212> DNA

<213> Homo sapiens

<400> 3409

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 120
 gagagagagg aaccttgccg gtccgaggca gctctgcgcg tcccctcctg cgcttagcat
 180
 cctcggccca gcgcggcccg caccgccatg gaggtgctgg agagcgggga gcagggcgtg
 240

ctgcagtggg accgcaagct gagcgagctg tcagagcccc gggacggcga ggccctcatg
 300
 taccacacgc acttctcaga acttctggat gagttttccc agaacgtctt gggtcagctc
 360
 ctgaatgatc ctttcctctc agagaagagt gtgtcaatgg aggtggaacc ttccccgacg
 420
 tccccggcgc ctctcatcca ggctgagcac agctactccc tgtgcgagga gcctcggggc
 480
 cagtcgccct tcaccacat taccaccagt gacagcttca atgacgatga ggtggaaagt
 540
 nngagaaatg gtacctgtct acagacttcc cttcaacatc catcaagaca gagccagtta
 600
 cagacgaacc acccccagga ctcggtccgt ctgtcactct gaccatcaca gccatctcca
 660
 ccncggttg aaaaggagga acctcctctg gaaatgaaca ctgggggttg ttcctcgtgc
 720
 cagaccatta ttctaaaat taagctggag cctcatgaag tggatcagtt tctaaacttc
 780
 tctcctaaag aaggtctgtc tngccctccc tgtgtccctt tgggttatgg atatggtctc
 840
 tgggtctaca gagagggaat atggcgagag agctgggatg agtttgtacc acagatgttg
 900
 tagctggctt tatgaaatag ctctgttctt aaaaaataaa aattttgctt ccaaataaa
 959

<210> 3410

<211> 144

<212> PRT

<213> Homo sapiens

<400> 3410

Met	Glu	Val	Leu	Glu	Ser	Gly	Glu	Gln	Gly	Val	Leu	Gln	Trp	Asp	Arg
1				5					10					15	
Lys	Leu	Ser	Glu	Leu	Ser	Glu	Pro	Gly	Asp	Gly	Glu	Ala	Leu	Met	Tyr
			20					25					30		
His	Thr	His	Phe	Ser	Glu	Leu	Leu	Asp	Glu	Phe	Ser	Gln	Asn	Val	Leu
			35					40					45		
Gly	Gln	Leu	Leu	Asn	Asp	Pro	Phe	Leu	Ser	Glu	Lys	Ser	Val	Ser	Met
			50				55				60				
Glu	Val	Glu	Pro	Ser	Pro	Thr	Ser	Pro	Ala	Pro	Leu	Ile	Gln	Ala	Glu
65						70				75				80	
His	Ser	Tyr	Ser	Leu	Cys	Glu	Glu	Pro	Arg	Ala	Gln	Ser	Pro	Phe	Thr
				85					90					95	
His	Ile	Thr	Thr	Ser	Asp	Ser	Phe	Asn	Asp	Asp	Glu	Val	Glu	Ser	Xaa
			100					105					110		
Arg	Asn	Gly	Thr	Cys	Leu	Gln	Thr	Ser	Leu	Gln	His	Pro	Ser	Arg	Gln
		115					120				125				
Ser	Gln	Leu	Gln	Thr	Asn	His	Pro	Gln	Asp	Ser	Phe	Arg	Leu	Ser	Leu
		130				135					140				

<210> 3411

<211> 958

<212> DNA

<213> Homo sapiens

<400> 3411

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 120
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<400> 3416

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Lys Ala Val Ile Glu Leu Leu Glu Lys Ser Val Gly Val Asn Leu Asp		
145	150	155
Gly Lys Lys Ile Leu Val Val Gly Ala His Gly Ser Leu Glu Ala Ala		160
	165	170
Leu Gln Cys Leu Phe Gln Arg Lys Gly Ser Met Thr Met Ser Ile Gln		175
	180	185
Trp Lys Thr Arg Gln Leu Gln Ser Lys Leu His Glu Ala Asp Ile Val		190
	195	200
Val Leu Gly Ser Pro Lys Pro Glu Glu Ile Pro Leu Thr Trp Ile Gln		205
	210	215
Pro Gly Thr Thr Val Leu Asn Cys Ser His Asp Phe Leu Ser Gly Lys		220
225	230	235
Val Gly Cys Gly Ser Pro Arg Ile Xaa Ile Leu Val Asp Ser Leu Arg		240
	245	250
		255
Lys Met Met		

<210> 3417

<211> 405

<212> DNA

<213> Homo sapiens

<400> 3417

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240
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300
cgatattgaa aatagaaaatt gattgtgggt aagttagttg gagtatttga cagttctaaa
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<210> 3418

<211> 94

<212> PRT

<213> Homo sapiens

<400> 3418

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20 25 30
Ile Phe Arg Ser Leu His Thr Leu Val Gly Gln Leu Asp Leu Arg Asp
35 40 45
Asp Val Val Lys Ile Thr Ile Asp Trp Asn Lys Leu Gln Ser Leu Ser
50 55 60
Ala Phe Gln Pro Ala Leu Leu Phe Ser Ala Leu Glu Gln His Ile Leu

65 70 75 80
Tyr Leu Gln Val Asn Phe Leu Leu Glu Met Ile Thr Arg Tyr
 85 90

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<210> 3419
<211> 418
<212> DNA
<213> Homo sapiens
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120
aatggggcta cgtcgcgtga cctcacgtgt ggttcctctg agcgtagtgc tttccagggc
180
aaccgtgtca cagtgcagat ggacgcacgg acggcgggtga gcctttaacg ccaagcaaca
240
agtcccattg tggacggagg tttgcatttc tcctgggtcc acatctatgg tgccccata
300
gggcgccttg aggctcgccc cggtcaggct tgccatttct ggggaagagg actggggggg
360
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418
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<210> 3420
<211> 105
<212> PRT
<213> Homo sapiens
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<400> 3420
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Ile Asp Val Asp Pro Gly Glu Met Gln Thr Ser Val His Asn Gly Thr
      20              25              30
Cys Cys Leu Ala Leu Lys Ala His Arg Arg Pro Cys Val His Leu His
      35              40              45
Cys Asp Thr Val Ala Leu Glu Ser Thr Thr Leu Arg Gly Thr Thr Arg
      50              55              60
Glu Val Thr Arg Arg Ser Pro Ile Asn Met Lys His Pro Glu Gln Gly
65              70              75              80
Glu Pro Gly Gly Pro Ala Asp Gln Trp Val Pro Arg Arg Glu Trp Ala
      85              90              95
Gly Trp Asp Gly Ser Gly Val Asn Arg
      100              105

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<210> 3421
<211> 2988
<212> DNA
<213> Homo sapiens
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180
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240
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300
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aggagcagcc gaccgtgcgc ttccaacacc aggtgctgct cgtggccctg ctcggacccg
420
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 2940
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<210> 3422

<211> 418

<212> PRT

<213> Homo sapiens

<400> 3422

Met	Ser	Arg	His	Leu	Pro	Trp	Ile	Cys	Asp	Gln	Arg	Cys	Ser	Ser	Pro
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Ser	Ser	Pro	Gly	Arg	Trp	Pro	Pro	Ala	Ala	Arg	Met	Trp	Leu	Pro	Arg

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<210> 3423
<211> 1851
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<212> DNA

<213> Homo sapiens

<400> 3423

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240
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agcctgccca gtccactcca gccagctgg tctgtcctt cctgcacctt catcaatgcc
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 1620
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 1680
 aagtccgaca tctccaggcc cccactgaac tccgggggacc tctactgact gcttgctggg
 1740
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 1800
 caaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa a
 1851

<210> 3424
 <211> 136
 <212> PRT
 <213> Homo sapiens

<400> 3424
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 Gln Arg Trp Val Ile Gly Arg Cys Leu Cys Val Pro Glu Arg Ser Leu
 20 25 30
 Ala Ser Tyr Gly Val Arg Gln Asp Gly Asp Pro Ala Phe Leu Tyr Leu
 35 40 45
 Leu Ser Ala Pro Arg Glu Ala Pro Ala Thr Gly Pro Ser Pro Gln His
 50 55 60
 Pro Gln Lys Met Asp Gly Glu Leu Gly Arg Leu Phe Pro Pro Ser Leu
 65 70 75 80
 Gly Leu Pro Pro Gly Pro Gln Pro Ala Ala Ser Ser Leu Pro Ser Pro
 85 90 95
 Leu Gln Pro Ser Trp Ser Cys Pro Ser Cys Thr Phe Ile Asn Ala Pro
 100 105 110
 Asp Arg Pro Gly Cys Glu Met Cys Ser Thr Gln Arg Pro Cys Thr Trp
 115 120 125
 Asp Pro Leu Ala Ala Ala Ser Thr
 130 135

<210> 3425
 <211> 1416
 <212> DNA
 <213> Homo sapiens

<400> 3425
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 120
 gaggaggaag tgaggccgcg cggaaggaag gcggcgagcc ccggggcccc gaggccttgg
 180
 ccgcgtcaca gcacccacat ggctcttgga gtgggcgcgg ccttcgagga actgcctcac
 240
 gacggcacgt gtgacgagtg cgagcccgac gaggctccgg gggccgagga agtgtgccga
 300

gaatgcggct tctgctactg ccgccgccat gccgaggcgc acaggcagaa gttcctcagt
 360
 caccatctgg ccgaatacgt ccacggctcc caggcctgga ccccgccagc tgacggagag
 420
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 480
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 540
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<210> 3426

<211> 410

<212> PRT

<213> Homo sapiens

<400> 3426

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Ala	Pro	Gly	Pro	Ala	Ser	Arg	Arg	Gly	Ala	Val	Gln	Ala	Gly	Gly	Asp
			20					25					30		
Ser	Leu	Gly	Arg	Asp	Pro	Gly	Arg	Glu	Glu	Glu	Val	Arg	Pro	Arg	Gly
			35				40					45			
Arg	Lys	Ala	Ala	Ser	Pro	Gly	Ala	Pro	Arg	Pro	Trp	Pro	Arg	His	Ser
	50					55					60				
Thr	His	Met	Ala	Ser	Gly	Val	Gly	Ala	Ala	Phe	Glu	Glu	Leu	Pro	His

65					70					75					80
Asp	Gly	Thr	Cys	Asp	Glu	Cys	Glu	Pro	Asp	Glu	Ala	Pro	Gly	Ala	Glu
				85					90					95	
Glu	Val	Cys	Arg	Glu	Cys	Gly	Phe	Cys	Tyr	Cys	Arg	Arg	His	Ala	Glu
			100					105					110		
Ala	His	Arg	Gln	Lys	Phe	Leu	Ser	His	His	Leu	Ala	Glu	Tyr	Val	His
			115				120					125			
Gly	Ser	Gln	Ala	Trp	Thr	Pro	Pro	Ala	Asp	Gly	Glu	Gly	Ala	Gly	Lys
	130					135					140				
Glu	Glu	Ala	Glu	Val	Lys	Val	Glu	Gln	Glu	Arg	Glu	Ile	Glu	Ser	Glu
145					150					155					160
Ala	Gly	Glu	Glu	Ser	Glu	Ser	Glu	Glu	Glu	Ser	Glu	Ser	Glu	Glu	Glu
				165					170					175	
Ser	Glu	Thr	Glu	Glu	Glu	Ser	Glu	Asp	Glu	Ser	Asp	Glu	Glu	Ser	Glu
			180					185					190		
Glu	Asp	Ser	Glu	Glu	Glu	Met	Glu	Asp	Glu	Gln	Glu	Ser	Glu	Ala	Glu
	195						200					205			
Glu	Asp	Asn	Gln	Glu	Glu	Gly	Glu	Ser	Glu	Ala	Glu	Gly	Glu	Thr	Glu
	210					215					220				
Ala	Glu	Ser	Glu	Phe	Asp	Pro	Glu	Ile	Glu	Met	Glu	Ala	Glu	Arg	Val
225					230					235					240
Ala	Lys	Arg	Lys	Cys	Pro	Asp	His	Gly	Leu	Asp	Leu	Ser	Thr	Tyr	Cys
				245					250					255	
Gln	Glu	Asp	Arg	Gln	Leu	Ile	Cys	Val	Leu	Cys	Pro	Val	Ile	Gly	Ala
			260				265						270		
His	Gln	Gly	His	Gln	Leu	Ser	Thr	Leu	Asp	Glu	Ala	Phe	Glu	Glu	Leu
		275					280					285			
Arg	Ser	Lys	Asp	Ser	Gly	Gly	Leu	Lys	Ala	Ala	Met	Ile	Glu	Leu	Val
	290					295					300				
Glu	Arg	Leu	Lys	Phe	Lys	Ser	Ser	Asp	Pro	Lys	Val	Thr	Arg	Asp	Gln
305					310					315					320
Met	Lys	Met	Phe	Ile	Gln	Gln	Glu	Phe	Lys	Lys	Val	Gln	Lys	Val	Ile
				325					330					335	
Ala	Asp	Glu	Glu	Gln	Lys	Ala	Leu	His	Leu	Val	Asp	Ile	Gln	Glu	Ala
			340					345					350		
Met	Ala	Thr	Ala	His	Val	Thr	Glu	Ile	Leu	Ala	Asp	Ile	Gln	Ser	His
		355					360					365			
Met	Asp	Arg	Leu	Met	Thr	Gln	Met	Ala	Gln	Ala	Lys	Glu	Gln	Leu	Asp
	370					375					380				
Thr	Ser	Asn	Glu	Ser	Ala	Glu	Pro	Lys	Ala	Glu	Gly	Asp	Glu	Glu	Gly
385					390					395					400
Pro	Ser	Gly	Ala	Ser	Glu	Glu	Glu	Asp	Thr						
				405					410						

<210> 3427

<211> 580

<212> DNA

<213> Homo sapiens

<400> 3427

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ccggatttca atgtcatagt tccattgtc aatgacatca tcggagaact tgacctgctg

120

ggggtctggat tgagacttgg accttctgag cactggcaga tgtactggct tctcttcagg
 180
 caggattttc tctggacaca actctgaact tagactcttt aaggactctg cactcctgtg
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 300
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 360
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 420
 tttcaggctc gacagacact ccagggaatc ttcataccac tgtgtttcat catgattata
 480
 ccctgaagcc ccattggtcca gttccaattc ctgaagcctt ctactgcttg cagggcctgg
 540
 gtggctgcca taagcagaat cgcccagtc atcttgtgac
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<210> 3428

<211> 132

<212> PRT

<213> Homo sapiens

<400> 3428

Met	Asp	Ser	Leu	Ala	Leu	Ser	Asn	Ile	Thr	Gly	Ala	Ser	Val	Asp	Gly
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Glu	Asn	Lys	Pro	Arg	Pro	Ser	Leu	Tyr	Ser	Leu	Gln	Asn	Phe	Glu	Glu
			20					25					30		
Met	Glu	Thr	Glu	Asp	Cys	Glu	Lys	Met	Ser	Asn	Met	Gly	Thr	Leu	Asn
		35					40					45			
Ser	Ser	Met	Leu	His	Arg	Ser	Ala	Glu	Ser	Leu	Lys	Ser	Leu	Ser	Ser
		50				55					60				
Glu	Leu	Cys	Pro	Glu	Lys	Ile	Leu	Pro	Glu	Glu	Lys	Pro	Val	His	Leu
65					70				75					80	
Pro	Val	Leu	Arg	Arg	Ser	Lys	Ser	Gln	Ser	Arg	Pro	Gln	Gln	Val	Lys
			85					90					95		
Phe	Ser	Asp	Asp	Val	Ile	Asp	Asn	Gly	Asn	Tyr	Asp	Ile	Glu	Ile	Arg
		100					105					110			
Gln	Pro	Pro	Met	Ser	Glu	Arg	Thr	Arg	Arg	Arg	Val	Tyr	Asn	Phe	Glu
		115				120					125				
Glu	Arg	Gly	Ser												
		130													

<210> 3429

<211> 634

<212> DNA

<213> Homo sapiens

<400> 3429

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 120
 gtcagcttcc ttttcatact ttcccggcgt tctctccacg agcagggtgca ccaggggacct
 180

gtccctctgt cctacacggt caccacagtg acgacccaag gcttcccctt gcctacaggc
 240
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 300
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<210> 3430

<211> 122

<212> PRT

<213> Homo sapiens

<400> 3430

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			20					25					30		
Tyr	Thr	Val	Thr	Thr	Val	Thr	Thr	Gln	Gly	Phe	Pro	Leu	Pro	Thr	Gly
		35				40						45			
Gln	His	Ile	Pro	Gly	Cys	Ser	Ala	Gln	Gln	Leu	Pro	Ala	Cys	Ser	Val
	50				55					60					
Met	Phe	Ser	Gly	Gln	His	Tyr	Pro	Leu	Cys	Cys	Leu	Pro	Pro	Pro	Leu
65					70					75				80	
Ile	Gln	Ala	Cys	Thr	Met	Gln	Gln	Leu	Pro	Val	Pro	Tyr	Gln	Ala	Tyr
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Pro	His	Leu	Ile	Ser	Ser	Asp	His	Tyr	Ile	Leu	His	Pro	Pro	Pro	Pro
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<210> 3431

<211> 1396

<212> DNA

<213> Homo sapiens

<400> 3431

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<210> 3432

<211> 296

<212> PRT

<213> Homo sapiens

<400> 3432

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20				25				30							
Arg	Val	Ala	Leu	Ala	Gly	Glu	Leu	Val	Gly	Val	Gly	Gly	His	Phe	Leu
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	85	90
Glu Ala Gln Ser Val Leu Arg Ile Leu Ala Glu Arg Asn Arg Pro His		95
	100	105
Gly Gln Met Leu Gly Glu Glu Ala Gln Glu Ala Leu Gln Asp Leu Glu		110
	115	120
Asn Thr Cys Pro Leu Pro Ala Thr Ser Ser Phe Ser Phe Ala Ser Leu		125
	130	135
Leu Asn Tyr Arg Asn Ile Trp Lys Asn Leu Leu Ile Leu Gly Phe Thr		140
145	150	155
Asn Phe Ile Ala His Ala Ile Arg His Cys Tyr Gln Pro Val Gly Gly		160
	165	170
Gly Gly Ser Pro Ser Asp Phe Tyr Leu Cys Ser Leu Leu Ala Ser Gly		175
	180	185
Thr Ala Ala Leu Ala Cys Val Phe Leu Gly Val Thr Val Asp Arg Phe		190
	195	200
Gly Arg Arg Gly Ile Leu Leu Leu Ser Met Thr Leu Thr Gly Ile Ala		205
	210	215
Ser Leu Val Leu Leu Gly Leu Trp Asp Cys Glu His Pro Ile Phe Pro		220
225	230	235
Thr Val Trp Ala Gln Gln Gly Asn Pro Asn Arg Asp Leu Asn Glu Ala		240
	245	250
Ala Ile Thr Thr Phe Ser Val Leu Gly Leu Phe Ser Ser Gln Ala Ala		255
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<210> 3433

<211> 1257

<212> DNA

<213> Homo sapiens

<400> 3433

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240

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<211> 311

<212> PRT

<213> Homo sapiens

<400> 3434

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				165					170					175			
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			180					185					190				
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	210					215					220						
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			245					250					255				
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	260					265					270						
Ile	Pro	Pro	Pro	Arg	Leu	His	Asn	Pro	Pro	Val	Tyr	Thr	Thr	Met	Ser		
	275					280				285							
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<210> 3435

<211> 1225

<212> DNA

<213> Homo sapiens

<400> 3435

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<210> 3436

<211> 408

<212> PRT

<213> Homo sapiens

<400> 3436

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			20					25					30		
Glu	Phe	Asn	Val	Ser	Cys	Leu	Thr	Asp	Ser	Asn	Ala	Asp	Thr	Tyr	Trp
		35					40					45			
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			100					105					110		
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		115					120					125			
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Ala	Asp	Leu	Phe	Gln	Pro	Thr	Ser	Leu	Val	Arg	Tyr	Pro	Arg	Leu	Glu
			165						170					175	
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		180						185					190		
Phe	Ile	Lys	Ile	Leu	Asp	Ser	Val	Leu	His	His	Leu	Val	Pro	Ala	Trp
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225					230					235					240
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Arg	Arg	Leu	Ala	Met	Glu	His	Arg	Ala	Cys	Pro	Ser	Arg	Asp	Pro	Ala

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<210> 3438

<211> 105

<212> PRT

<213> Homo sapiens

<400> 3438

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			20					25					30		
Glu	Ala	Glu	Pro	Gln	Trp	Glu	Arg	Glu	Gly	Ala	Arg	Phe	Thr	Thr	Pro

	35					40						45							
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<210> 3439

<211> 1519

<212> DNA

<213> Homo sapiens

<400> 3439

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<211> 287

<212> PRT

<213> Homo sapiens

<400> 3440

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Leu	Ser	Pro	Cys	Ser	Pro	Val	Ser	Arg	Pro	Pro	Arg	Ala	Ser	Thr
		20						25					30	Ala
Val	Ala	Ala	Ala	Ala	Arg	Trp	Pro	Arg	Gln	Pro	Arg	His	Pro	Arg
		35					40					45		His
Thr	Ser	Pro	Met	Pro	Pro	Pro	Ala	Ala	Leu	Arg	Pro	Pro	Ala	Gly
	50					55					60			Pro
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Phe	Leu	Ser	Ala	Pro	Leu	Val	Pro	Arg	Ser	Pro	Gly	Gly	Glu	Ser
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Asp	Ser	Ser	Gln	Ala	Gly	Thr	Arg	Leu	Val	Pro	Glu	His	Ala	Ala
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His	Thr	Gln	Gly	His	Gly	Pro	Ser	Gly	Pro	Gly	Thr	Trp	Ser	Gly
		180						185					190	Ser
Glu	Arg	Pro	Gly	Cys	Leu	Ala	Asp	Arg	Thr	Ser	Glu	Thr	Thr	Gln
		195					200					205		Pro
Ser	Phe	Glu	Asp	Ala	Pro	Ala	Gln	Pro	Ser	Pro	Gly	Val	Pro	Trp
	210					215						220		Arg
Thr	Thr	Leu	Ala	Glu	Thr	Leu	Leu	Ile	Pro	Gly	Leu	Glu	Leu	Gly
225					230					235				240
Gly	Arg	Gln	Ala	Ser	Thr	Pro	Thr	Leu	Gly	Asn	Ala	Glu	Pro	Leu
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Met	Cys	Ala	Arg	Gly	Arg	Val	Cys	Val	Phe	Leu	Arg	Val	Ser	Leu
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<210> 3441

<211> 2074

<212> DNA

<213> Homo sapiens

<400> 3441

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1320

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<210> 3442

<211> 374

<212> PRT

<213> Homo sapiens

<400> 3442

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			20					25					30		
Ala	Glu	Leu	Leu	Met	Ser	Leu	His	Asp	Leu	Asp	Val	Gly	Glu	Ile	Cys
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Ala	Pro	Val	Ser	Tyr	Pro	Asn	Thr	Leu	Pro	Glu	Ser	Phe	Thr	Lys	Phe		
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			260					265					270				
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Leu	Glu	Pro	Thr	Gly	Gln	Ser	Gly	Glu	Ala	Val	Lys	Glu	Leu	Tyr	Ser		
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Gln	Leu	Gly	Glu	Lys	Leu	Glu	Gln	Leu	Asp	His	Arg	Lys	Pro	Ser	Pro		
			340					345					350				
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<210> 3443

<211> 2070

<212> DNA

<213> Homo sapiens

<400> 3443

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<210> 3444

<211> 579

<212> PRT

<213> Homo sapiens

<400> 3444

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          35           40           45
Cys Ser Leu Ser Phe Gln Ala Thr Lys Cys Lys Leu Ala Gly Leu Glu
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Val Leu Ser Asp Asp Pro Asp Leu Val Lys Val Val Glu Ser Leu Thr
65           70           75           80
Cys Gly Lys Ile Phe Ala Val Glu Ile Leu Asp Lys Ala Asp Ile Pro
          85           90           95
Leu Val Val Leu Tyr Asp Thr Ser Gly Glu Asp Asp Ile Asn Ile Asn
          100          105          110
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Gln Val Asp Ala Met Tyr Thr Asn Val Lys Ile Thr Asn Ile Cys Ser
          130          135          140
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145          150          155          160
Ser Asp Leu Leu Arg Lys Ile Glu Asp Tyr Phe His Cys Lys His Met
          165          170          175
Thr Ser Glu Cys Phe Val Ser Leu Pro Phe Cys Gly Lys Ile Cys Leu
          180          185          190
Phe His Cys Lys Gly Lys Trp Leu Arg Val Glu Ile Thr Asn Val His
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Ser Ser Arg Ala Leu Asp Val Gln Phe Leu Asp Ser Gly Thr Val Thr
          210          215          220
Ser Val Lys Val Ser Glu Leu Arg Glu Ile Pro Pro Arg Phe Leu Gln
225          230          235          240
Glu Met Ile Ala Ile Pro Pro Gln Ala Ile Lys Cys Cys Leu Ala Asp
          245          250          255
Leu Pro Gln Ser Ile Gly Met Trp Thr Pro Asp Ala Val Leu Trp Leu
          260          265          270
Arg Asp Ser Val Leu Asn Cys Ser Asp Cys Ser Ile Lys Val Thr Lys
          275          280          285
Val Asp Glu Thr Arg Gly Ile Ala His Val Tyr Leu Phe Thr Pro Lys
          290          295          300
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          325          330          335
Gly Ala Asp Ser Pro Asn Ser Lys Asn Gly Asn Met Pro Met Ser Gly
          340          345          350
Asn Thr Gly Glu Asn Phe Arg Lys Asn Leu Thr Asp Val Ile Lys Lys
          355          360          365
Ser Met Val Asp His Thr Ser Ala Phe Ser Thr Glu Glu Leu Pro Pro
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Lys	Val	Glu	Asn	Lys	Trp	His	Arg	Val	Leu	Leu	Lys	Gly	Ile	Leu	Thr		
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Val	Asn	Ile	Arg	Lys	Val	Gln	Pro	Leu	Val	Asp	Met	Phe	Arg	Lys	Leu		
			485						490					495			
Pro	Phe	Gln	Ala	Val	Thr	Ala	Gln	Leu	Ala	Gly	Val	Lys	Cys	Asn	Gln		
		500						505					510				
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Pro	Leu	Val	Ala	Leu	Val	Gln	Thr	Val	Ile	Glu	Asn	Ala	Asn	Pro	Trp		
	530					535				540							
Asp	Arg	Lys	Val	Val	Val	Tyr	Leu	Val	Asp	Thr	Ser	Leu	Pro	Asp	Thr		
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<210> 3445

<211> 2086

<212> DNA

<213> Homo sapiens

<400> 3445

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720

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<210> 3446

<211> 169

<212> PRT

<213> Homo sapiens

<400> 3446

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35	40	45	
Tyr Leu Glu Phe Glu Asp Thr Glu Glu Asn Lys Leu Ile Tyr Thr Pro			
50	55	60	
Ile Phe Asn Glu Tyr Ile Ser Leu Val Glu Lys Tyr Ile Glu Glu Gln			
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Leu Leu Gln Arg Ile Pro Glu Phe Asn Met Ala Ala Phe Thr Thr Thr			
85	90	95	
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100	105	110	
Asp Ile Phe Asp Met Leu Leu Thr Phe Thr Asp Phe Leu Ala Phe Lys			
115	120	125	
Glu Met Phe Leu Asp Tyr Arg Ala Glu Lys Glu Gly Arg Gly Leu Asp			
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<210> 3447

<211> 936

<212> DNA

<213> Homo sapiens

<400> 3447

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780

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<211> 302

<212> PRT

<213> Homo sapiens

<400> 3448

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Tyr	Leu	Gly	Lys	Thr	His	Ala	Lys	Asn	Leu	Lys	Leu	Lys	Gln	Gln	Ser
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Thr	Lys	Val	Glu	Ala	Leu	His	Gln	Asn	Arg	Glu	Met	Ile	Asp	Pro	Asp
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Lys	Leu	Met	Ala	Arg	Tyr	Gly	Arg	Leu	Ala	Asp	Pro	Ala	Val	Thr	Asp
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Phe	Pro	Ala	Gly	Lys	Gly	Tyr	Pro	Cys	Lys	Thr	Cys	Lys	Ile	Val	Leu
			245					250						255	
Asn	Ser	Ile	Glu	Gln	Tyr	Gln	Ala	His	Val	Ser	Gly	Phe	Lys	His	Lys
		260						265					270		
Asn	Gln	Ser	Pro	Lys	Thr	Val	Ala	Ser	Ser	Leu	Gly	Gln	Ile	Pro	Met
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<210> 3449

<211> 877

<212> DNA

<213> Homo sapiens

<400> 3449

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780
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<211> 276

<212> PRT

<213> Homo sapiens

<400> 3450

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      20             25             30
Ser Val Thr Ala Asn Ser Gln Ser Pro Ala Leu Leu Ala Gly Thr Asn
      35             40             45
Pro Val Ala Val Val Ala Asp Gly Gly Ser Cys Pro Ala His Tyr Pro
      50             55             60
Val His Glu Cys Val Phe Lys Gly Asp Val Arg Arg Leu Ser Ser Leu
65             70             75             80
Ile Arg Thr His Asn Ile Gly Gln Lys Asp Asn His Gly Asn Thr Pro
      85             90             95
Leu His Leu Ala Val Met Leu Gly Asn Lys Glu Cys Ala His Leu Leu

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